FILE 'INPADOC, WPIX, JAPIO, PIRA, RAPRA, HCAPLUS' ENTERED AT 19:35:00 ON 21 MAR 2002
L5 13 S (JP95-96737/PRN OR JP95-96737/AP)

FILE 'DPCI' ENTERED AT 19:38:31 ON 21 MAR 2002
L6 1 S (JP95-96737/PRN OR JP95-96737/AP)

FILE 'HCAPLUS' ENTERED AT 19:41:46 ON 21 MAR 2002
L8 5 S (EP 230112 OR EP 388979 OR EP 609860 OR JP 57157765 OR JP 60115622 OR US 3720639 OR US 4816545)/PN
SEL RN L8
L9 0 S EP 738603/PN
L10 1 S JP 1995-96737/PRN
L11 0 S EP1994-250736/PRN,AP OR JP1982-95785/PRN,AP
SEL L10 RN
L12 6 S (106-89-8/BI OR 108050-41-5/BI OR 108050-42-6/BI OR 109033-14-9/BI OR 111843-25-5/BI OR 113962-81-5/BI OR 122715-22-4/BI OR 122715-23-5/BI OR 1319-77-3/BI OR 134426-38-3/BI OR 134426-39-4/BI OR 25068-38-6/BI OR 26146-93-0/BI OR 26471-62-5/BI OR 29934-09-6/BI OR 29934-10-9/BI OR 2994-63-0/BI OR 31257-80-4/BI OR 42263-55-8/BI OR 42263-56-9/BI OR 42263-57-0/BI OR 42263-58-1/BI OR 51311-17-2/BI OR 69709-05-3/BI OR 77974-91-5/BI OR 80-05-7/BI OR 85-42-7/BI OR 9002-84-0/BI OR 1992-15-0/BI OR 2093-04-1/BI OR 307-30-2/BI OR 376-90-9/BI) AND (L8 OR L10)

FILE 'HCAPLUS' ENTERED AT 19:52:55 ON 21 MAR 2002
S 307-30-2/REG#

FILE 'REGISTRY' ENTERED AT 19:52:56 ON 21 MAR 2002
L13 1 S 307-30-2/RN

FILE 'HCAPLUS' ENTERED AT 19:52:56 ON 21 MAR 2002
L14 169 S L13
S 376-90-9/REG#

FILE 'REGISTRY' ENTERED AT 19:52:57 ON 21 MAR 2002
L15 1 S 376-90-9/RN

FILE 'HCAPLUS' ENTERED AT 19:52:57 ON 21 MAR 2002
L16 72 S L15
S 1992-15-0/REG#

FILE 'REGISTRY' ENTERED AT 19:52:58 ON 21 MAR 2002
L17 1 S 1992-15-0/RN

FILE 'HCAPLUS' ENTERED AT 19:52:58 ON 21 MAR 2002
L18 22 S L17
S 2093-04-1/REG#

FILE 'REGISTRY' ENTERED AT 19:52:59 ON 21 MAR 2002
L19 1 S 2093-04-1/RN

FILE 'HCAPLUS' ENTERED AT 19:52:59 ON 21 MAR 2002
L20 9 S L19
L21 5 S L14 AND L16
L22 2 S L14 AND L18
L23 1 S L14 AND L20
L24 1 S L16 AND L18
L25 1 S L16 AND L20
L26 2 S L18 AND L20
L27 7 S (L21 OR L22 OR L23 OR L24 OR L25 OR L26)
L28 6 S L27 NOT L12
SEL RN

FILE 'HCAPLUS' ENTERED AT 19:52:59 ON 21 MAR 2002
L29 241921 S (307-30-2/BI OR 375-01-9/BI OR 376-90-9/BI OR 75-89-8/BI OR 920-66-1/BI OR 422-05-9/BI OR 425-61-6/BI OR 76-37-9/BI OR 128557-25-5/BI OR 1515-14-6/BI OR 1992-15-0/BI OR 28788-68-3/BI OR 307-70-0/BI OR 335-99-9/BI OR 355-74-8/BI OR 355-80-6/BI OR 376-18-1/BI OR 101-84-8/BI OR . . . .)
L30 6 S L28 AND L29

FILE 'REGISTRY' ENTERED AT 19:58:54 ON 21 MAR 2002
L31 263 S (106-89-8/BI OR 108050-41-5/BI OR 108050-42-6/BI OR 109033-14-9/BI OR 111843-25-5/BI OR 113962-81-5/BI OR 122715-22-4/BI OR 122715-23-5/BI OR 1319-77-3/BI OR 134426-38-3/BI OR 134426-39-4/BI OR 25068-38-6/BI OR 26146-93-0/BI OR . . . .)
L32 227 S L31 AND F/ELS
L33 8519 S FLUOROPOLYMER/PCT
L34 36 S F/ELS AND C/ELS AND MONOMER
L35 161360 S "EPOXY RESIN"/PCT OR EPOXY
L36 38429 S "EPOXY RESIN"/PCT
L37 5270 S EPOXY AND (MONOMER OR POLY OR POLYMER OR HOMOPOLYMER OR COPOLYMER)
L38 42005 S (L36 OR L37)
L39 304 S OXYCYCLOHEXANE?
L40 59790 S (PHENYL OR BENZENE OR CYCLO) AND EPOXY
L41 64 S L40 AND RESIN
L42 470 S EPOXY AND RESIN
L43 100320 S (L38 OR L39 OR L40 OR L41 OR L42)

FILE 'HCAPLUS' ENTERED AT 20:09:06 ON 21 MAR 2002
L44 298940 S L43 OR EPOXY RESIN
L45 18372 S L44 AND ((L32 OR L33 OR L34) OR "F" OR FL OR FLUORO OR PERFLUORO? OR FLUOROCARBON OR FLUORIN###### OR POLYFLUORO?)
L46 5902 S (FUNCTIONAL OR REACT########)(L)(L32 OR L33 OR L34)
L47 47158 S (FUNCTIONAL OR REACT########)(8A)("F" OR FL OR FLUORO OR PERFLUORO? OR FLUOROCARBON OR FLUORIN###### OR POLYFLUORO?)
L48 51412 S (L46 OR L47)
L49 1542 S L44 AND L48
L50 407 S L49 AND (CURE## OR CURING OR CURAB######## OR CUREAB##########)
L51 228 S L50 AND (CATION######## OR CROSSLINK##### OR CROSS LINK#### OR INITIAT########)
L52 3659 S EPOX###(8A)("F" OR FL OR FLUORO OR PERFLUORO? OR FLUOROCARBON OR FLUORIN###### OR POLYFLUORO?)
L53 54970 S EPOX###/TI
L54 103272 S ("F" OR FL OR FLUORO OR PERFLUORO? OR FLUOROCARBON OR FLUORIN###### OR POLYFLUORO?)/TI
L55 791035 S (REACT###### OR FUNCTIONAL OR SUBSTITUENT)/ TI
L56 18247 S (SUBSTITUENT OR SUBSTITUT#####)(8A)("F" OR FL OR FLUORO OR PERFLUORO? OR FLUOROCARBON OR FLUORIN###### OR POLYFLUORO?)
L57 167663 S SUBSTITUT#####/TI
L58 27222 S EPOX#####(8A)(CURE## OR CURING OR CURAB#### ### OR CUREAB##########)
L59 42942 S (CURE## OR CURING OR CURAB######## OR CUREAB##########)/TI
L60 1278515 S (POLYMER########## OR POLY OR POLYM###)/TI,ST,IT
L61 116 S L51 AND L52
L62 107 S L51 AND L53
L63 35 S L51 AND L54
L64 19 S L51 AND L55
L65 5 S L51 AND L56

FILE 'HCAPLUS' ENTERED AT 20:09:06 ON 21 MAR 2002
L66 1 S L51 AND L57
L67 123 S L51 AND L58
L68 92 S L51 AND L59
L69 110 S L51 AND L60
L70 59 S L51 AND CURING AGENT
L71 58 S L70 AND (L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR L60)
L72 12703 S L43(L)(CURE## OR CURING OR CURAB######## OR CUREAB#########)
L73 22938 S EPOX#####(4A)(CURE## OR CURING OR CURAB######## OR CUREAB#########)
L74 7122 S L53 AND L59
L75 42 S L70 AND (L72 OR L73 OR L74)
D BIB AB HITSTR 1-42
L76 6660 S L54 AND (L56 OR L57)
L77 40 S L50 AND (PROMOT######## OR ACCELERA########)
L78 241 S L51 OR L77
L79 1 S L76 AND L78
L80 9552 S CATALY##########(4A)(CURE## OR CURING OR CURAB######## OR CUREAB#########)
L81 39 S L50 AND L80
L82 247 S L78 OR L81
L83 2379 S HARDEN######(4A)(CURE## OR CURING OR CURAB######## OR CUREAB#########)
L84 249 S (L50 AND L83) OR L82
L85 206 S L84 NOT (L75 OR L79)
L86 70 S L85 AND (INK JET#### OR INKJET### OR (B41J002? OR C08G059? OR A01G025)/IC)
L87 1 S L86 AND (NOZZLE OR HEAD OR PRINTHEAD OR ORIFICE OR FLOWPATH OR FLOW PATH OR (INK OR DROP OR DROPLET)(2A)(FLOW### OR TRAVEL### OR PATH))
L88 407 S (L50 OR L51) OR (L61 OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70 OR L71) OR L85
L89 144 S L88 AND (INK JET#### OR INKJET### OR (B41J002? OR C08G059? OR A01G025)/IC)
L90 1 S L89 AND (NOZZLE OR HEAD OR PRINTHEAD OR ORIFICE OR FLOWPATH OR FLOW PATH OR (INK OR DROP OR DROPLET)(2A)(FLOW### OR TRAVEL### OR PATH))
L91 1586 S L45 AND (INK JET#### OR INKJET### OR (B41J002? OR C08G059? OR A01G025)/IC)
L92 26 S L91 AND (NOZZLE OR HEAD OR PRINTHEAD OR ORIFICE OR FLOWPATH OR FLOW PATH OR (INK OR DROP OR DROPLET)(2A)(FLOW### OR TRAVEL### OR PATH))
L93 25 S L92 NOT (L87 OR L75 OR L79)
L94 15136 S L43(L)(CURE## OR CURING OR CURAB######## OR CUREAB######### OR HARDEN####)
L95 36234 S EPOX####(8A)(CURE## OR CURING OR CURAB##### ## OR CUREAB######### OR HARDEN####)
L96 3 S L93 AND (L94 OR L95)
L97 10 S L93 AND (AGENT## OR PROMOT##### OR CATALY##### OR CATION#### OR INITIAT###### OR CROSSLINK##### OR CROSS LINK######)
L98 13 S (L96 OR L97)
L99 8 S L88 AND COUPLING AGENTS
L100 6 S L99 NOT (L87 OR L75 OR L79 OR L98)
L101 7523 S COATING(L)(L32 OR L33 OR L34)
L102 0 S L93 AND ACCELERA########
L103 10443 S (LAYER OR COATING OR REPELLANT)(3A)("F" OR FL OR FLUORO OR PERFLUORO? OR FLUOROCARBON OR FLUORIN###### OR POLYFLUORO?)
L104 31 S L88 AND (L101 OR L03)
L105 29 S L104 NOT (L99 OR L87 OR L75 OR L79 OR L98)
L106 0 S L88 AND CLOG####
L107 2 S L93 AND COUPL###
L108 30 S L105 OR (L107 NOT (L99 OR L87 OR L75 OR L79 OR L98))

3/21/02 08/634,255

Other search reports

L6 ANSWER 1 OF 1 DPCI COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 1996-466612 [47] DPCI
DNN N1996-393011 DNC C1996-146447
TI Liq. jet recording head - comprises curable epoxy cpd., cpd. having fluorocarbon moiety and curing agent, for discharge of droplets.
DC A21 A89 E14 E16 G06 L03 P75 T04
IN MIYAGAWA, M; OHKUMA, N; TOSHIMA, H
PA (CANO) CANON KK
CYC 23
PI EP 738603 A2 19961023 (199647)* EN 15p B41J002-16
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE
AU 9650801 A 19961031 (199651) C08G059-08
JP 08290572 A 19961105 (199703) 10p B41J002-05
CA 2174589 A 19961022 (199708) B41J002-135
EP 738603 A3 19970723 (199743)
MX 9601501 A1 19970401 (199821) A01G025-00
SG 64375 A1 19990427 (199933) B41J002-16
CA 2174589 C 19991207 (200017) EN B41J002-135
AU 724344 B 20000921 (200050) C08G059-08
CN 1145855 A 19970326 (200106) B41J002-16
EP 738603 B1 20010801 (200144) EN B41J002-16
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE
DE 69614176 E 20010906 (200159) B41J002-16
ES 2158970 T3 20010916 (200164) B41J002-16
Cited by Examiner

Equivalent for 08/634,255

CITING PATENT	CAT	CITED PATENT	ACCNO
EP 738603	A2	No Citations	
EP 738603	B1	EP 230112 A	1987-207472/30
		PA: (STAH) STANDARD OIL CO OHIO	
		IN: GIORDANO, P J; SMIERCLAK, R C	
		EP 388979 A	1990-291934/39
		PA: (CANO) CANON KK	
		IN: EBISAWA, I; NOGUCHI, H	
		EP 609860 A	1994-250736/31
		PA: (CANO) CANON KK	
		IN: INADA, G; MIYAGAWA, M; OKUMA, N; SATO, T; TOSHIMA, H; OHKUMA, N	
		JP 57157765 A	1982-95785E/45
		PA: (FUIT) FUJITSU LTD	
		JP 60115622 A	1985-187193/31
		PA: (TOKE) TOSHIBA KK	
		US 3720639 A	1973-17926U/13
		PA: (USNA) US SEC OF NAVY	
		US 4816545 A	1987-349789/50
		PA: (AUSY) AUSIMONT SPA	
		IN: DONATI, G; RE, A	

REN LITERATURE CITATIONS UPR: 20011002

Citations by Examiner

CITING PATENT	CAT	CITED LITERATURE
EP 738603	B1	PATENT ABSTRACTS OF JAPAN vol. 006, no. 263 (M-181), 22 December 1982 & JP 57 157765 A (FUJITSU KK), 29 September 1982,
EP 738603	B1	PATENT ABSTRACTS OF JAPAN vol. 009, no. 267

JP60115622 A

STIC-EIC2800 CP4-9C18 Jeff Harrison 306-5429

Equivalent

L12 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1997:107165 HCAPLUS
DN 126:119452
TI Ink-jet recording head with multiple ink-jet orifices
IN Ookuma, Norio; Myagawa, Masashi; Toshima, Hiroaki
PA Canon Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAMILY MEMBERS FOR 08/634,255

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08290572	A2	19961105	JP 1995-96737	19950421
AU 9650801	A1	19961031	AU 1996-50801	19960422 <--
AU 724344	B2	20000921		
PRAI JP 1995-96737	A	19950421 <--		

AB The recording head is formed with a resin which is cured from a compn. contg. a curable epoxy compd., a fluorocarbon-having compd., and a crosslinking agent. The crosslinking agent may be a cationic polymn. initiator, the fluorocarbon-having compd. has a formula HO-CH2-(CF2)n-CH2-OH (n = 1-20), and the epoxy compd. may be an aliph. ring or an arom. one contg. oxycyclohexane skeleton.

IT **307-30-2 376-90-9 1992-15-0 2093-04-1**
RL: RCT (Reactant)
(F-contg. compd. contained in curable compn. for ink-jet recording head)

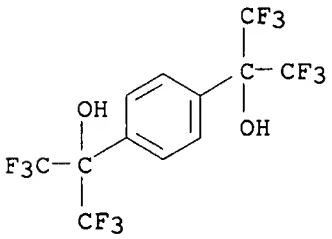
RN 307-30-2 HCAPLUS
CN 1-Octanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

$HO-CH_2-(CF_2)_6-CF_3$

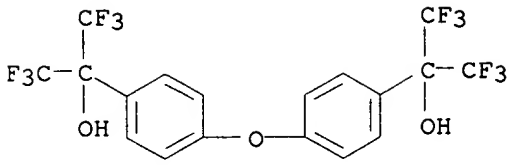
RN 376-90-9 HCAPLUS
CN 1,5-Pentanediol, 2,2,3,3,4,4-hexafluoro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

$HO-CH_2-(CF_2)_3-CH_2-OH$

RN 1992-15-0 HCAPLUS
CN 1,4-Benzenedimethanol, .alpha.,.alpha.,.alpha.',.alpha.'-tetrakis(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 2093-04-1 HCAPLUS
CN Benzenemethanol, 4,4'-oxybis[.alpha.,.alpha.-bis(trifluoromethyl)- (9CI) (CA INDEX NAME)



(12) PATENT
(19) AUSTRALIAN PATENT OFFICE

(11) Application No. AU 199650801 B2
(10) Patent No. 724344

(54) Title
Liquid jet recording head and process f r production th r f

(51)[7] International Patent Classification(s)
C08G 059/08 C08K 005/095
C08G 059/04 C08K 005/17
C08J 005/00

(21) Application No: **199650801** (22) Application Date: **1996.04.22**

(30) Priority Data

(31) Number	(32) Date	(33) Country
7-96737	1995.04.21	JP

(43) Publication Date : **1996.10.31**
(43) Publication Journal Date : **1996.10.31**
(44) Accepted Journal Date : **2000.09.21**

(71) Applicant(s)
Canon Kabushiki Kaisha

(72) Inventor(s)
Norio Ohkuma; Masashi Miyagawa; Hiroaki Toshima

(74) Agent/Attorney
SPRUSON and FERGUSON,GPO Box 3898,SYDNEY NSW 2001

(56) Related Art
US 5478606
US 3852222
US 5458254

S & F Ref: 337566

AUSTRALIA

PATENTS ACT 1990

COMPLETE SPECIFICATION

FOR A STANDARD PATENT

ORIGINAL

Name and Address of Applicant: Canon Kabushiki Kaisha
30-2, 3-chome, Shimomaruko
Ohta-ku
Tokyo
JAPAN

Actual Inventor(s): Norio Ohkuma, Masashi Miyagawa and Hiroaki Toshima

Address for Service: Spruson & Ferguson, Patent Attorneys
Level 33 St Martins Tower, 31 Market Street
Sydney, New South Wales, 2000, Australia

Invention Title: Liquid Jet Recording Head and Process for Production Thereof

The following statement is a full description of this invention, including the best method of performing it known to me/us:-

3/21/02 08/634,255 Cited by Australia

21mar02 21:21:40 User259284 Session D1713.1

File 350:Derwent WPIX 1963-2001/UD,UM &UP=200219
(c) 2002 Derwent Info Ltd

Set	Items	Description
S1	3	PN=(US 5478606 OR US 3852222 OR US 5458254)

? logoff

1/9/1

WPI Acc No: 1994-250736/199431
XRAM Acc No: C94-114026
XRPX Acc No: N94-198154

Ink jet recording head mfr. for full line type recording head - by forming ink flow path pattern and coating with epoxy resin forming ink ejection outlets in coating and dissolving pattern for colour recording head

Patent Assignee: CANON KK (CANO)
Inventor: INADA G; MIYAGAWA M; OKUMA N; SATO T; TOSHIMA H; OHKUMA N

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 609860	A2	19940810	EP 94101556	A	19940202	199431	B
JP 6286149	A	19941011	JP 9410078	A	19940131	199445	
US 5478606	A	19951226	US 94190464	A	19940202	199606	
			US 95392686	A	19950223		
EP 609860	A3	19950816	EP 94101556	A	19940202	199613	
CN 1104585	A	19950705	CN 94102753	A	19940202	199729	
EP 609860	B1	19980603	EP 94101556	A	19940202	199826	
DE 69410648	E	19980709	DE 610648	A	19940202	199833	
ES 2116478	T3	19980716	EP 94101556	A	19940202	199835	
KR 152452	B1	19981201	KR 941857	A	19940202	200031	

Abstract (Basic): EP 609860 A

The mfr. comprises A) forming an ink flow path pattern on a substrate (II), having ink ejection pressure generating elements, using a dissoluble resin (III); B) forming a resin coating layer (IV) on the pattern, which serve as ink flow path walls, by dissolving a coating resin (V) which is solid at normal temps. and contains an epoxy resin (VI) in a solvent (VII) then coating the soln. on the ink flow path pattern; C) forming ink ejection outlets in (IV) above the ink ejection pressure generating elements; and D) dissolving the ink flow path pattern.

There is a further step after dissolving the ink flow path pattern of dipping (IU) in a soln. contg. a reducing agent (X) and heating. The ink ejection outlets are formed by photolithography, by dry etching with oxygen plasma, or by an eximer laser. The conc. of the (V) in (VII) is pref. 30-70 (40-60) wt.%, it is a photosensitive resin and contains a cationic photopolymerisation initiator (VIII), pref. an aromatic iodonium salt and a reducing agent (IX), pref. Cu triflate. (VI) has an epoxy equiv. of 2,000 or less. (X) contains Cu ions, pref. Cu triflate.

USE/ADVANTAGE - (I) is effective for a full line type recording head and for a colour recording head. The distance between the ink ejection pressure generating element and the orifice is set with high precision and high reproducibility. Laser and plasma do not damage the base plate during prodn. (V) may be thermosetting or photosensitive.

Abstract (Equivalent): US 5478606 A

A method of manufacturing an ink jet recording head, comprises: (1) forming an ink flow path pattern on a substrate with the use of a dis-soluble resin, the substrate having ink ejection pressure generating elements thereon; (2) forming on the ink flow path pattern a coating resin layer, which will serve as ink flow path walls, by dissolving in a solvent a coating resin containing an epoxy resin which is solid at ordinary temperatures, and then solvent-coating the solution on the ink flow path pattern; (3) forming ink ejection outlets in the coating resin layer above the ink ejection pressure generating elements; and (4) dissolving the ink flow path pattern.

1/9/2
DIALOG(R)File 350:Derwent WPIX

009694591 **Image available**
WPI Acc No: 1993-388144/199349
Related WPI Acc No: 1998-044485
XRAM Acc No: C93-172627
XRPX Acc No: N93-299752
High resolution ink jet recording head mfr. - by oxygen plasma dry etching to form ink ports and resin elution to form flow passages
Patent Assignee: CANON KK (CANO)
Inventor: MIYAGAWA M; OHKUMA N; TOSHIMA H
Number of Countries: 018 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 573023	A1	19931208	EP 93108889	A	19930602	199349	B
JP 5330066	A	19931214	JP 92144502	A	19920604	199403	
US 5458254	A	19951017	US 9370842	A	19930603	199547	
			US 94194810	A	19940214		
			US 94364020	A	19941227		
EP 573023	B1	19981230	EP 93108889	A	19930602	199905	
			EP 97116871	A	19930602		
DE 69322812	E	19990211	DE 622812	A	19930602	199912	
			EP 93108889	A	19930602		
US 5945260	A	19990831	US 9370842	A	19930603	199942	

Abstract (Basic): EP 573023 A
Mfr. of a liq. jet recording head comprises (i) forming an ink flow passage pattern on a substrate (1) by means of a resin layer (4); (ii) forming a covering resin layer (5) on the resin layer (4); (iii) forming an ink discharging port pattern on layer (5) using a material (6) having high resistance to an O2 plasma; (iv) O2 plasma dry etching the resin layer (4) using the ink discharging port pattern as a mask; and (v) eluting the resin layer (4).
ADVANTAGE - Problems such as tapering encountered when laser machining is used are avoided and high resolution recording heads with precisely machined liq. passages can be obtd. at high productivity using a widened range of materials to obtain a prod. with stable ink discharge characteristics.
Abstract (Equivalent): US 5458254 A
Mfr. of liq. jet recording heat includes (1) forming ink flow passage pattern on substrate by dissolvable resin layer; (2) forming covering resin layer on the pattern; (3) forming an ink discharge port pattern by a material having resistance to an oxygen plasma in the surface of the covering resin layer; (4) forming ink discharge ports by dry etching the covering resin layer by application of oxygen plasma with the discharge port pattern on mark; and (5) eluting the dissolvable resin layer.
ADVANTAGE - Method enables productivity to be improved to provide inexpensive, precise, reliable ink jet recording head having high resolution. Good mechanical strength and chemical tolerance are provided.

3/21/02 08/634,255 Cited by Australia

1/9/3
DIALOG(R)File 350:Derwent WPIX

001214605
WPI Acc No: 1974-88510V/**197451**
Crosslinkable fluorinated epoxy resins useful as coatings - prepared from one or more fluorinated diol(s) and epichlorohydrin
Patent Assignee: US SEC OF NAVY (USNA)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 3852222	A	19741203				197451	B

Priority Applications (No Type Date): US 73373322 A 19730625

Abstract (Basic): US 3852222 A

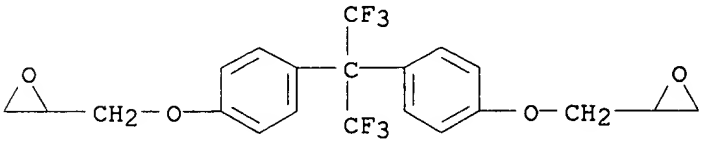
A random epoxy(glycidyl)-terminated copolymer having units. (RfCH2CHCH2-)x (R'fCH2CHCH2-)y (I) and R'f is -OCH2(CF2)zCH2O- z being 2-12, x is 1-4, and y is 0-4, provided y is not always equal to 0. (I) is pref. either crosslinked via pendant OH gps. using diisocyanates (toluene- or hexamethylenediisocyanate or their deriv.) or via epoxy gps. at terminals using polyamines esp. diethylene triamine. (I) is pref. prepared by reacting 1,3-bis(2-hydroxyhexafluoro-2-propyl)benzene, 2,2,3,3,4,4-hexafluoro-1, 5-pentanediol and/or 1,4-bis(2-hydroxyhexafluoro-2-propyl)benzene with epichlorohydrin pref. in equimolar amounts, and NaOH in the presence of acetone, and heating to reflux. Fluorinated polymers obtd. are useful as coatings, adhesives and laminates.

Cited by EPO

L12 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1991:418674 HCAPLUS
DN 115:18674
TI Derivatives of 1,3- or 1,4-bis(hexafluoroisopropyl)benzene, or 2,2-bisphenylhexafluoropropane, ink-repellent agent containing such deriv. compound, head for ink-jet recording treated with such ink-repellent agent and ink jet recording device equipped with such head
IN Ebisawa, Isao; Noguchi, Hiromichi
PA Canon K. K., Japan
SO Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

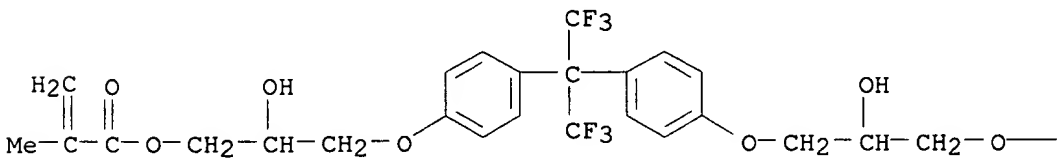
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 388979	A2	19900926	EP 1990-105574	19900323 <--
	EP 388979	A3	19910206		
	JP 03007781	A2	19910114	JP 1990-62842	19900315
	JP 11286114	A2	19991019	JP 1999-9512	19990118
	JP 3217761	B2	20011015		
PRAI	JP 1989-70548	A	19890324		
	JP 1990-62842	A	19900315		

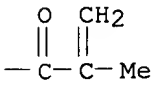
OS MARPAT 115:18674
AB The title derivs. are I, or II [X = epoxy group or CH2:C(Y)CO2(CH2CHOHCH2O)m(CO)n; Y = H, Me; m,n = 0 or 1, when m = 0, n is also 0]. The derivs. are used as ink-repellent agent or ink-jet printing head in recording app.
IT **2994-63-0 69709-05-3 108050-41-5**
108050-42-6 109033-14-9 113962-81-5
122715-22-4 122715-23-5 134426-39-4
RL: USES (Uses)
(ink repellent, on ink-jet printing head)
RN 2994-63-0 HCAPLUS
CN Oxirane, 2,2'-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis(4,1-phenyleneoxymethylene)]bis- (9CI) (CA INDEX NAME)



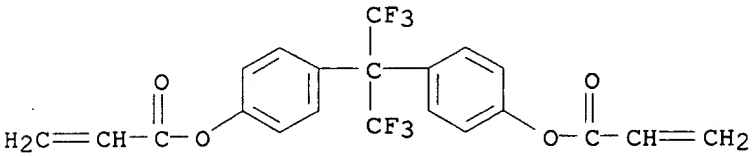
RN 69709-05-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A

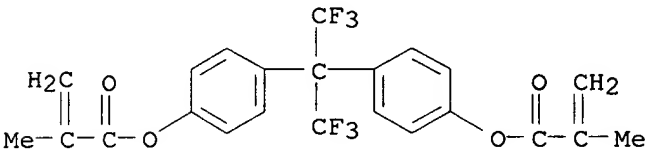




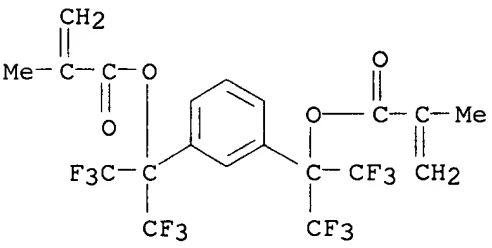
RN 108050-41-5 HCAPLUS
CN 2-Propenoic acid, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]di-4,1-phenylene ester (9CI) (CA INDEX NAME)



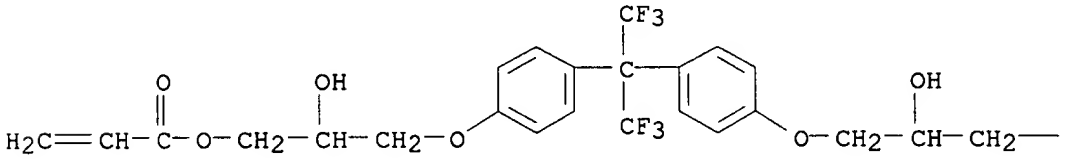
RN 108050-42-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]di-4,1-phenylene ester (9CI) (CA INDEX NAME)



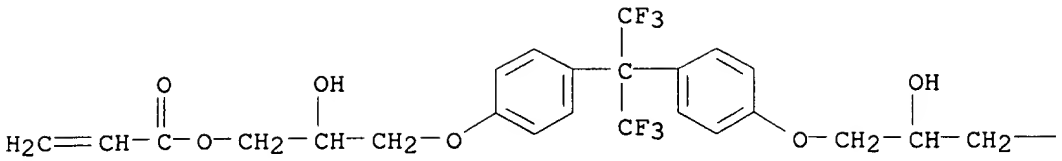
RN 109033-14-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] ester (9CI) (CA INDEX NAME)



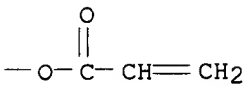
RN 113962-81-5 HCAPLUS
CN 2-Propenoic acid, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



PAGE 1-A

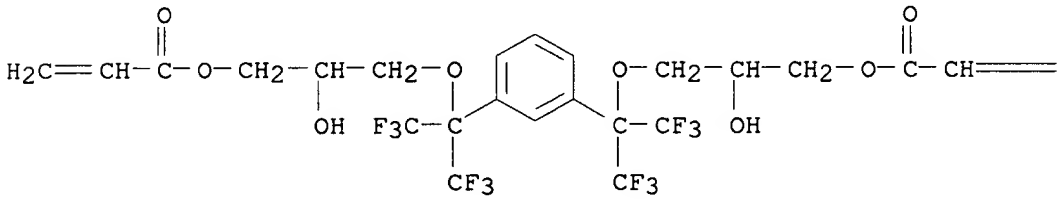


PAGE 1-B



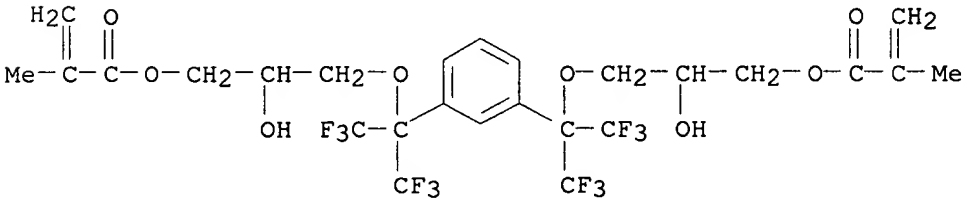
RN 122715-22-4 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



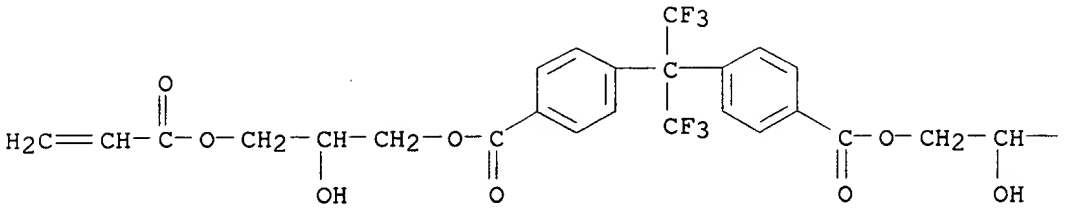
PAGE 1-B

RN 122715-23-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

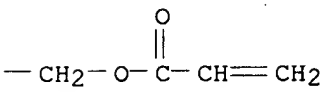


RN 134426-39-4 HCAPLUS
CN Benzoic acid, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, bis[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

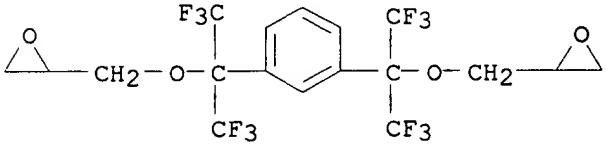


PAGE 1-B

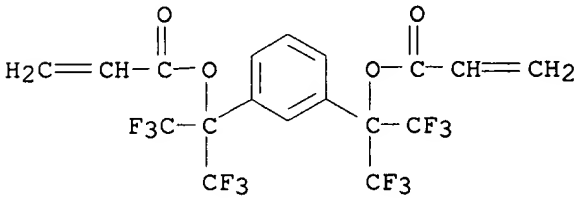


IT **26146-93-0P 77974-91-5P 134426-38-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and use of, as ink-repellent, on ink-jet printing head)

RN 26146-93-0 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis- (9CI) (CA INDEX NAME)

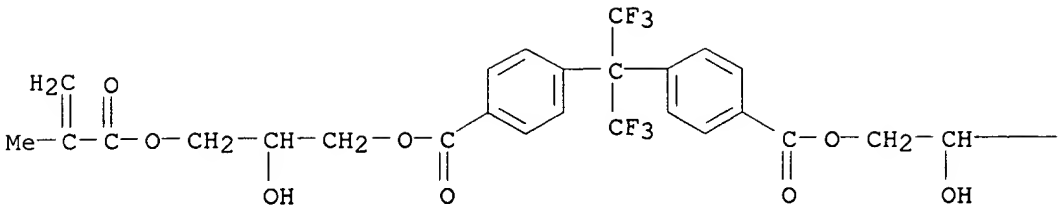


RN 77974-91-5 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] ester (9CI) (CA INDEX NAME)

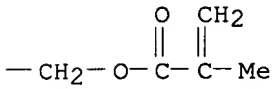


RN 134426-38-3 HCAPLUS
CN Benzoic acid, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, bis[2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



Cited by EPO

L12 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1985:561556 HCAPLUS
DN 103:161556
TI Epoxy resin compositions
PA Toshiba Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60115622	A2	19850622	JP 1983-223323	19831129 <--

AB Polymer compns. with excellent insulating properties at high temps. and humidities, useful for sealing and impregnating of elec. app. (no data), contain epoxy resins, hardeners having .gtoreq.2 phenolic OH groups, fluorinated carbon (I) [**51311-17-2**], and curing accelerators. Thus, cresol novolak epoxy resin (epoxy equiv. 220) 170, brominated novolak epoxy resin (epoxy equiv. 290) 20, novolak hardener 80, PPh3 2, I 5, powd. fused silica 720, montan wax 2, C black 3, and a silane coupling agent 4 parts were kneaded, cooled, pulverized, transfer molded at 180.degree. for 3 min, and post-cured at 180.degree. for 8 h to obtain test plates which showed resistivity 3 .times. 1014 .OMEGA.-cm at 150.degree. and 3 .times. 1015 .OMEGA.-cm at 25.degree. after 7 days in satd. steam at 120.degree.; vs. 1 .times. 1014 and 5 .times. 1014 .OMEGA.-cm, resp., without the I.

IT **51311-17-2**
RL: USES (Uses)
(epoxy resin compns. contg., for heat- and moisture-resistant elec. insulation)
RN 51311-17-2 HCAPLUS
CN Carbon fluoride (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **1319-77-3D**, polymers with epoxides
RL: USES (Uses)
(novolak, potting compns., contg. fluorinated carbon for high heat and moisture resistance)
RN 1319-77-3 HCAPLUS
CN Phenol, methyl- (9CI) (CA INDEX NAME)

D1—OH

D1—Me

L108 ANSWER 29 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1979:458187 HCAPLUS
DN 91:58187
TI Catalytic solutions of sulfonium salts
IN Tsao, Jung-Hsien; Ketley, Arthur D.
PA Grace, W. R., and Co., USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
IC C08F002-46; C08F004-00
NCL 424044000
CC 36-6 (Plastics Manufacture and Processing)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4154872	A	19790515	US 1978-904158	19780509
	US 4179400	A	19791218	US 1979-6322	19790125
PRAI	US 1978-904158		19780509		

AB Photocatalytic solns. of a sulfonium salt of a complex anion, capable of yielding a Lewis acid when irradiated, are preped. by **reaction** of a sulfonium halide with an alkali metal or NH4 salt of the complex anion in a solvent mixt. contg. a polyol and a lactone and removal of the alkali metal or NH4 halide byproduct by filtration. The compn. mixes readily with **epoxy resin** formulations for photochem. **crosslinking**. Thus, Ph3S+ PF6- [**57835-99-1**] was prepd. by stirring at room temp. a mixt. of a 50% polypropylene glycol [**25322-69-4**] soln. of Ph3S+ Cl- 10, KPF6 31, and .gamma.-butyrolactone [96-48-0] 25 parts. Within 0.5 h a homogeneous soln. was obtained after KCl removal. The catalyst soln. (10%) was formulated with 90% of an epoxy blend comprising 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate 60, bisphenol A diglycidyl ether 14, 1,4-butanediol diglycidyl ether 5, silicone oil 0.75, and surfactant 0.25 part. A film (0.0012 cm thick) of the compn. on a steel plate was **cured** to an adherent, tack-free **coating** in 1 pass through a UV unit at 0.9 s exposure and conveyer speed 30.5 m/min.

IT **Epoxy resins**, uses and miscellaneous
RL: USES (Uses)
(**crosslinking** catalysts for, photochem., sulfonium salt solns. as)

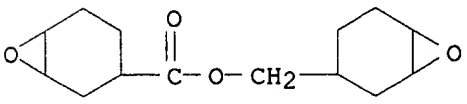
IT Coating materials
(epoxy, **crosslinking** of, photocatalytic solns. of sulfonium salts for)

IT **25085-98-7 59045-72-6 70977-27-4**
RL: USES (Uses)
(**crosslinking** catalysts for, photochem., sulfonium salt solns. as)

RN 25085-98-7 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

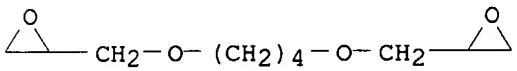
CRN 2386-87-0
CMF C14 H20 O4



RN 59045-72-6 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 2,2'-[1,4-butanediylbis(oxymethylene)]bis[oxirane] and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

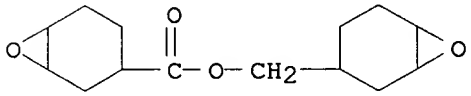
CM 1

CRN 2425-79-8
CMF C10 H18 O4



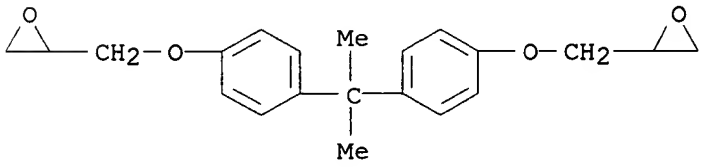
CM 2

CRN 2386-87-0
CMF C14 H20 O4



CM 3

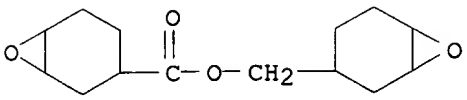
CRN 1675-54-3
CMF C21 H24 O4



RN 70977-27-4 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with oxydi-2,1-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

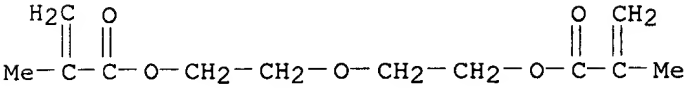
CM 1

CRN 2386-87-0
CMF C14 H20 O4

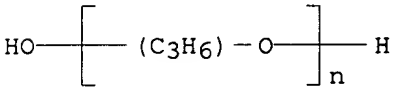


CM 2

CRN 2358-84-1
CMF C12 H18 O5



IT **25322-69-4**
RL: USES (Uses)
(solvents, for sulfonium salt photochem. **crosslinking** catalysts, for **epoxy resins**)
RN 25322-69-4 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)



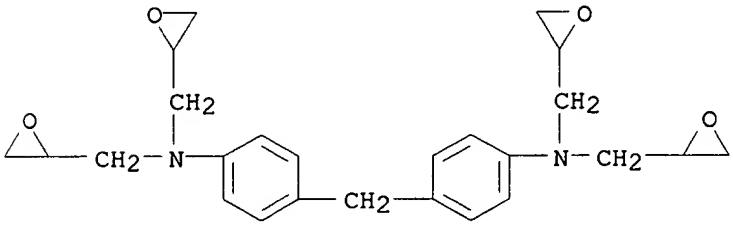
L75 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1980:447876 HCAPLUS
DN 93:47876
TI **Curing agent** for polyepoxides, **epoxy resins** and **cured** composites
IN Serafini, T. T.; Delvigs, P.; Vannucci, R. D.
PA United States National Aeronautics and Space Administration, USA
SO U. S. Pat. Appl., 14 pp. Avail. NTIS.
CODEN: XAXXAV
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 70771		19800118	US 1979-70771	19790830

AB **Curing agents** which impart char-forming properties to **epoxy resins** when burned comprise a bis(aminoimide) (I, R = tetravalent aryl, and R1 = divalent aryl). Thus, 8.38 g 4,4'-(hexafluoroisoropylidene)bis(phthalic anhydride) [1107-00-2] in 26.64 g N-methylpyrrolidone (II) was added dropwise at room temp. to 7.29 g 4,4'-methylenedianiline [101-77-9] in 23.76 g II. The soln. was stirred 2 h and refluxed 2 h to give bis(aminoamide) (III) [72704-37-1] m. 165-75.degree.. Graphite fibers impregnated with 10 g N,N,N',N'-tetraglycidyl methylenedianiline [**28768-32-3**] and 16.1 g III had flexural strengths 224 .times. 103 psi and 106 .times. 103 psi at room temp. and 177.degree., resp. after 24 h **curing** in air at 204.degree..

IT **28768-32-3**
RL: USES (Uses)
(**crosslinking** agents for, bis(aminoimides) as)

RN 28768-32-3 HCAPLUS
CN Oxiranemethanamine, N,N'-(methylenedi-4,1-phenylene)bis[N-(oxiranylmethyl)- (9CI) (CA INDEX NAME)

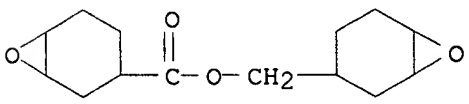


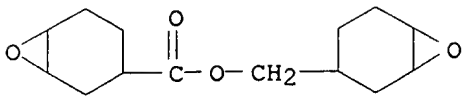
L108 ANSWER 19 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1991:124655 HCAPLUS
DN 114:124655
TI Acid-, weather-, and soil-resistant coatings with good surface properties
IN Numa, Nobushige; Nakahata, Akimasa; Yamane, Masahiro; Isozaki, Osamu; Nakai, Noboru
PA Kansai Paint Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L027-12
ICS C09D127-16
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 37
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02228350	A2	19900911	JP 1989-50585	19890302

AB The title coatings useful for automobile topcoats contain dispersion particles which are prepd. by radical polymn. of vinyl monomers in an org. solvent in the presence of a copolymer, as dispersion stabilizer, of fluoro vinyl monomers, hydroxy vinyl monomers, vinyl monomers having hydroxy and/or hydrolyzable groups attached to a Si atom, and epoxy vinyl monomers. Radical polymn. of glycidyl vinyl ether 15, CH2:CHSi(OH)(OMe)2 15, CH2:CHO(CH2)4OH 10, vinyl cyclohexyl ether 10, and CF2:CFCl 50 parts gave a copolymer (I) with no.-av. mol. wt. 7000. Radical polymn of CH2:CHCO2C2H4C8F17 10, CH2:CHCO2C2H4OH 10, CH2:C(Me)CO2C3H6Si(OMe)3 10, oxiranylcyclohexylmethyl acrylate 50, styrene 10, and CH2:CH(Me)CO2C4H9 10 parts and addn. reaction with acrylic acid gave a dispersion stabilizer. Polymg. acrolein 20, CH2:C(Me)CO2Me 42, CH2:CMeCO2C2H4OH 35, and CH2:CHC6H4CH:CH2 3 parts in the presence of 50% stabilizer gave a dispersion with particle diam 0.16 .mu.m. Applying I 30, the dispersion 70, tris(ethylacetoacetato) aluminum, and TiO2 35 parts onto a undercoated- and second coated-steel panel and **curing** at 140.degree. resulted in a top coat with good surface properties and good resistance to water, acid, etc.

T **Crosslinking** catalysts
(coatings contg., for automobiles)
IT Dispersing agents
(**polymeric**, reactive, for **polymn**. of vinyl monomers)
IT Fluoropolymers
RL: USES (Uses)
(reactive dispersion stabilizers, for **polymn**. of vinyl monomers)
T 79-10-7, 2-Propenoic acid, reactions 79-41-4, Methacrylic acid, reactions
RL: RCT (Reactant)
(esterification of, with ethoxy-contg. **polymers**)
IT **2386-87-0**
RL: USES (Uses)
(coatings contg., for automobiles)
RN 2386-87-0 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

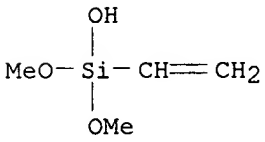




IT **131718-56-4 131718-58-6 131718-61-1**
RL: TEM (Technical or engineered material use); USES (Uses)
(**coatings**, for automobile panels, with good surface properties)
RN 131718-56-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with chlorotrifluoroethene, ethenylbenzene, ethenyldimethoxysilanol, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane, [(ethenyloxy)methyl]oxirane, methyl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and 2-propenenitrile, graft (9CI) (CA INDEX NAME)

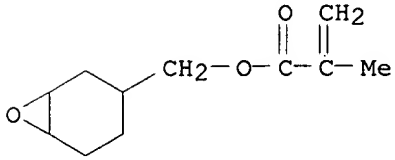
CM 1

CRN 131718-55-3
CMF C4 H10 O3 Si



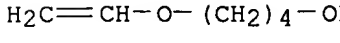
CM 2

CRN 82428-30-6
CMF C11 H16 O3



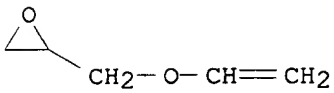
CM 3

CRN 17832-28-9
CMF C6 H12 O2



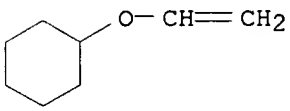
CM 4

CRN 3678-15-7
CMF C5 H8 O2



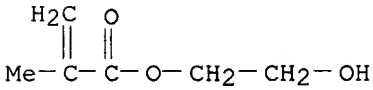
CM 5

CRN 2182-55-0
CMF C8 H14 O



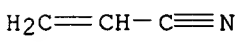
CM 6

CRN 868-77-9
CMF C6 H10 O3



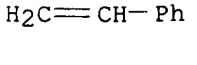
CM 7

CRN 107-13-1
CMF C3 H3 N



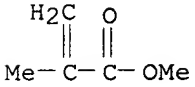
CM 8

CRN 100-42-5
CMF C8 H8



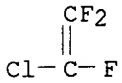
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

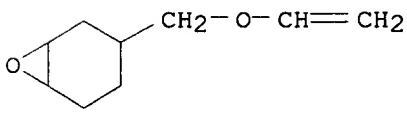
CRN 79-38-9
CMF C2 Cl F3



RN 131718-58-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with chlorotrifluoroethene, ethenylbenzene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane, 3-[(ethenyloxy)methyl]-7-oxabicyclo[4.1.0]heptane, [3-(ethenyloxy)propyl]trimethoxysilane, methyl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

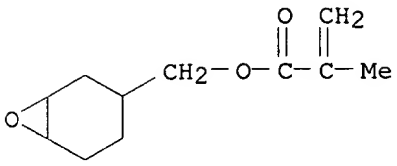
CM 1

CRN 131718-57-5
CMF C9 H14 O2



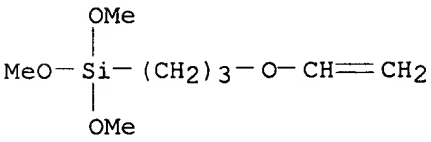
CM 2

CRN 82428-30-6
CMF C11 H16 O3



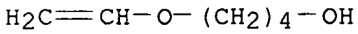
CM 3

CRN 41622-27-9
CMF C8 H18 O4 Si



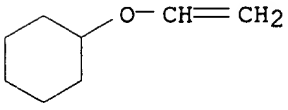
CM 4

CRN 17832-28-9
CMF C6 H12 O2



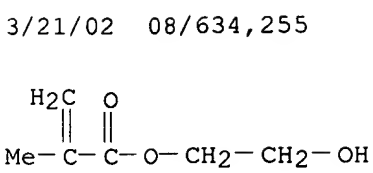
CM 5

CRN 2182-55-0
CMF C8 H14 O



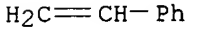
CM 6

CRN 868-77-9
CMF C6 H10 O3



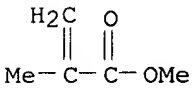
CM 7

CRN 100-42-5
CMF C8 H8



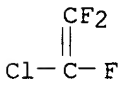
CM 8

CRN 80-62-6
CMF C5 H8 O2



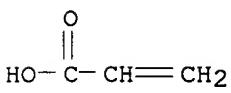
CM 9

CRN 79-38-9
CMF C2 Cl F3



CM 10

CRN 79-10-7
CMF C3 H4 O2

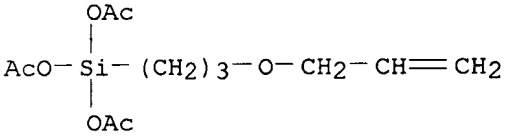


RN 131718-61-1 HCAPLUS

CN Butanoic acid, ethenyl ester, polymer with chlorotrifluoroethene, ethenyl acetate, ethenylbenzene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, methyl 2-methyl-2-propenoate, octahydro-3-[(2-propenyloxy)methyl]-2H-indeno[1,2-b]oxirene, 2-propenenitrile, 2-(2-propenyloxy)ethanol, [3-(2-propenyloxy)propyl]silylidyne triacetate and tetrafluoroethene, graft (9CI) (CA INDEX NAME)

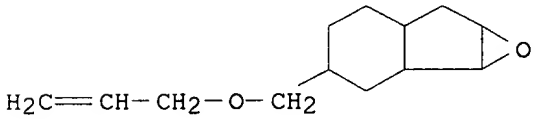
CM 1

CRN 131718-60-0
CMF C12 H20 O7 Si



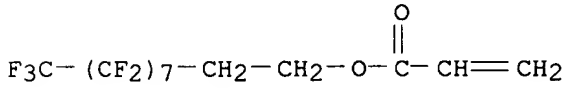
CM 2

CRN 131718-59-7
CMF C13 H20 O2



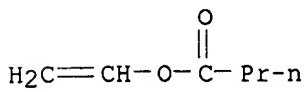
CM 3

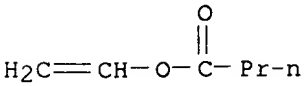
CRN 27905-45-9
CMF C13 H7 F17 O2



CM 4

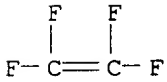
CRN 123-20-6
CMF C6 H10 O2





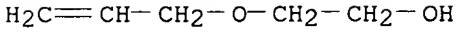
CM 5

CRN 116-14-3
CMF C2 F4



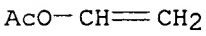
CM 6

CRN 111-45-5
CMF C5 H10 O2



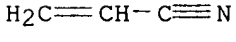
CM 7

CRN 108-05-4
CMF C4 H6 O2



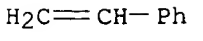
CM 8

CRN 107-13-1
CMF C3 H3 N



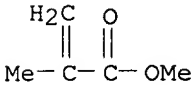
CM 9

CRN 100-42-5
CMF C8 H8



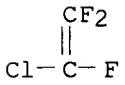
CM 10

CRN 80-62-6
CMF C5 H8 O2

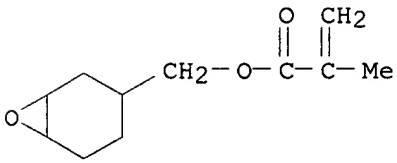


CM 11

CRN 79-38-9
CMF C2 Cl F3



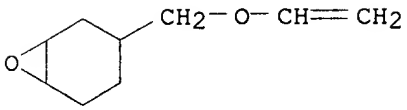
IT **82428-30-6D, polymers** with vinyl-contg. siloxanes and fluorovinyl monomers **131895-81-3D, reaction** products with isocyanates
RL: USES (Uses)
(dispersion stabilizers, for radical **polymn.** of vinyl monomers)
RN 82428-30-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester (9CI) (CA INDEX NAME)



RN 131895-81-3 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with chlorotrifluoroethene, (ethenyloxy)cyclohexane, 3-[(ethenyloxy)methyl]-7-oxabicyclo[4.1.0]heptane and [3-(ethenyloxy)propyl]trimethoxysilane (9CI) (CA INDEX NAME)

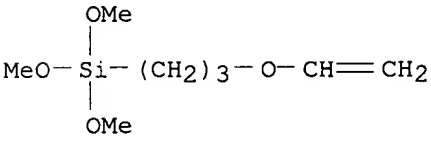
CM 1

CRN 131718-57-5
CMF C9 H14 O2



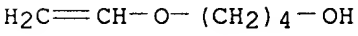
CM 2

CRN 41622-27-9
CMF C8 H18 O4 Si



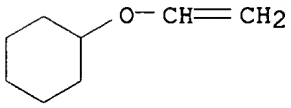
CM 3

CRN 17832-28-9
CMF C6 H12 O2



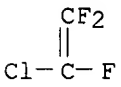
CM 4

CRN 2182-55-0
CMF C8 H14 O



CM 5

CRN 79-38-9
CMF C2 Cl F3



L108 ANSWER 17 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1991:166448 HCAPLUS
DN 114:166448
TI **Curable** fluoropolymer coating compositions
IN Nakahata, Akimasa; Numa, Nobushige; Yamane, Masahiro; Isozaki, Osamu; Nakai, Noboru
PA Kansai Paint Co., Ltd., Japan
SO Ger. Offen., 63 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C08L101-02
ICS C08L057-04; C08L043-04; C09D201-02; C09D157-04; C09D143-04
ICA C08J003-24; C08L083-04; C08L075-04; C08L067-02; C08L063-00; C08L029-02; C08L029-10
ICI C08L101-02, C08L101-04, C08L101-06, C08L101-10; C08L057-04, C08L057-08, C08L057-10
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

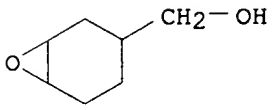
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4006589	A1	19900913	DE 1990-4006589	19900302
	DE 4006589	C2	19941006		
	JP 02232221	A2	19900914	JP 1989-52537	19890303
	JP 2787326	B2	19980813		
	GB 2230267	A1	19901017	GB 1990-4110	19900223
	GB 2230267	B2	19920624		
	US 5166265	A	19921124	US 1990-486697	19900301
	CA 2011357	AA	19900903	CA 1990-2011357	19900302
	CA 2011357	C	19971209		
	CA 2122985	C	19971216	CA 1990-2122985	19900302
	US 5260376	A	19931109	US 1992-904257	19920625
	US 5408001	A	19950418	US 1993-107580	19930818
	US 5525673	A	19960611	US 1994-277429	19940718
PRAI	JP 1989-52537		19890303		
	US 1990-486697		19900301		
	CA 1990-2011357		19900302		
	US 1992-904257		19920625		
	US 1993-107580		19930818		

AB Coating compns. with good storage stability giving coatings with good environmental resistance, contain alcs., epoxides, and hydrolyzable silanes, .gtoreq.1 of which is a fluoropolymer. AIBN-**initiated** polymn. of 4-(vinyloxy)butanol 15, cyclohexyl vinyl ether 30, Et vinyl ether 5, and C2ClF3 50 parts in MIBK at 60.degree. gave a polymer (I) with no.-av. mol. wt. 5000. A mixt. of I 50, 60:20:20 p-phenylene diisocyanate-2-hydroxyethyl acrylate-3,4-epoxycyclohexanemethanol adduct (1:1:1)-styrene-Bu methacrylate copolymer 30, 20:20:60 3-[tris(dimethylaminolsilyl]propyl acrylate-styrene-Bu acrylate copolymer 20, TiO2 80, and Al(AcAc)3 1 part was coated (25 .mu.m) on primed steel and baked 30 min at 170.degree. to give a coating with gloss 90, pencil hardness H, xylene resistance (5 best, 1 worst) 5, crosscut adhesion 100/100, and impact resistance (0.5 Kg) 30 cm.

IT **767-11-3D**, 7-Oxabicyclo[4.1.0]heptane-3-methanol, reaction products with functional fluoropolymers **88795-12-4** **88795-12-4D**, **reaction** products with (trimethoxysilyl)propanethiol **131808-30-5** **131808-31-6** **131808-32-7** **133002-87-6**
RL: TEM (Technical or engineered material use); USES (Uses)
(**coatings**, with good storage stability and environmental resistance)

RN 767-11-3 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-methanol (6CI, 7CI, 8CI, 9CI) (CA INDEX

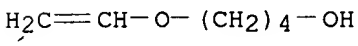
NAME)



RN 88795-12-4 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with chlorotrifluoroethene, (ethenyloxy)cyclohexane and ethoxyethene (9CI) (CA INDEX NAME)

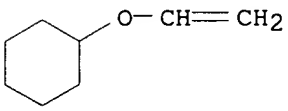
CM 1

CRN 17832-28-9
CMF C6 H12 O2



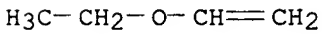
CM 2

CRN 2182-55-0
CMF C8 H14 O



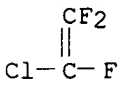
CM 3

CRN 109-92-2
CMF C4 H8 O



CM 4

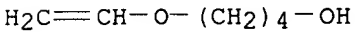
CRN 79-38-9
CMF C2 Cl F3



RN 88795-12-4 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with chlorotrifluoroethene, (ethenyloxy)cyclohexane and ethoxyethene (9CI) (CA INDEX NAME)

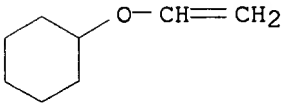
CM 1

CRN 17832-28-9
CMF C6 H12 O2



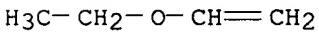
CM 2

CRN 2182-55-0
CMF C8 H14 O



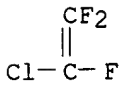
CM 3

CRN 109-92-2
CMF C4 H8 O



CM 4

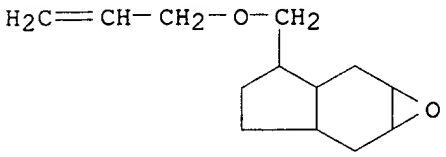
CRN 79-38-9
CMF C2 Cl F3



RN 131808-30-5 HCAPLUS
CN Butanoic acid, ethenyl ester, polymer with chlorotrifluoroethene, ethenyl acetate, octahydro-3-[(2-propenyloxy)methyl]-2H-indeno[5,6-b]oxirene and [3-(2-propenyloxy)propyl]silylidyne triacetate (9CI) (CA INDEX NAME)

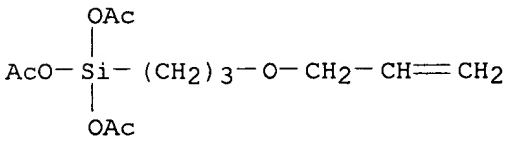
CM 1

CRN 131808-29-2
CMF C13 H20 O2



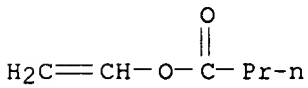
CM 2

CRN 131718-60-0
CMF C12 H20 O7 Si



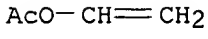
CM 3

CRN 123-20-6
CMF C6 H10 O2



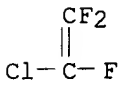
CM 4

CRN 108-05-4
CMF C4 H6 O2



CM 5

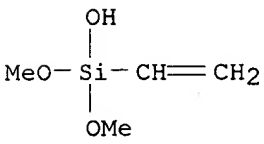
CRN 79-38-9
CMF C2 Cl F3



RN 131808-31-6 HCAPLUS
CN Silanol, ethenyldimethoxy-, polymer with chlorotrifluoroethene, (ethenyloxy)cyclohexane, ethoxyethene and tetrafluoroethene (9CI) (CA INDEX NAME)

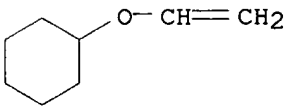
CM 1

CRN 131718-55-3
CMF C4 H10 O3 Si



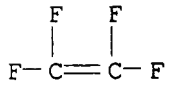
CM 2

CRN 2182-55-0
CMF C8 H14 O



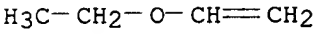
CM 3

CRN 116-14-3
CMF C2 F4



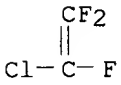
CM 4

CRN 109-92-2
CMF C4 H8 O



CM 5

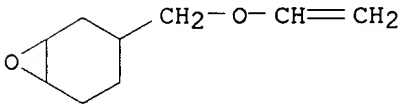
CRN 79-38-9
CMF C2 Cl F3



RN 131808-32-7 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane, 2-[(ethenyloxy)methyl]-, polymer with chlorotrifluoroethene and (ethenyloxy)cyclohexane (9CI) (CA INDEX NAME)

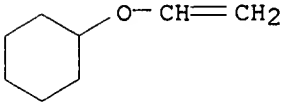
CM 1

CRN 131718-57-5
CMF C9 H14 O2



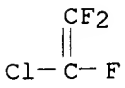
CM 2

CRN 2182-55-0
CMF C8 H14 O



CM 3

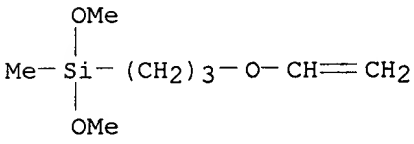
CRN 79-38-9
CMF C2 Cl F3



RN 133002-87-6 HCAPLUS
CN Butanoic acid, ethenyl ester, polymer with chlorotrifluoroethene, (ethenyloxy)cyclohexane, [3-(ethenyloxy)propyl]dimethoxymethylsilane and 2-(2-propenyloxy)ethanol (9CI) (CA INDEX NAME)

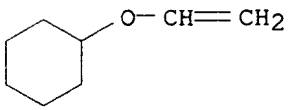
CM 1

CRN 133002-86-5
CMF C8 H18 O3 Si



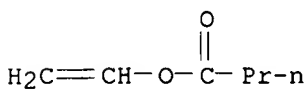
CM 2

CRN 2182-55-0
CMF C8 H14 O



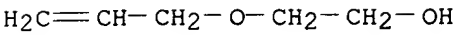
CM 3

CRN 123-20-6
CMF C6 H10 O2



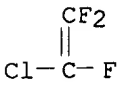
CM 4

CRN 111-45-5
CMF C5 H10 O2



CM 5

CRN 79-38-9
CMF C2 Cl F3



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L12 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1973:419650 HCAPLUS
DN 79:19650
TI Curable fluorinated polyols
IN Griffith, James R.
PA United States Dept. of the Navy
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 3720639	A	19730313	US 1971-156492	19710624 <--
PRAI US 1970-13172		19700220		

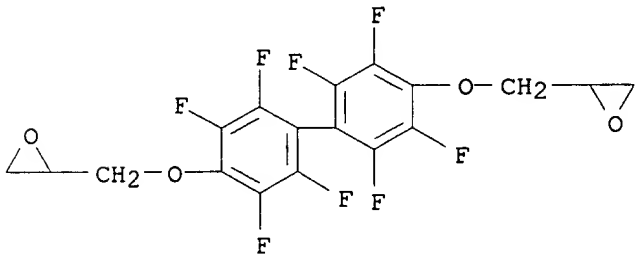
AB A fluorinated diglycidyl ether was treated with a fluorinated diol to give a curable polyol; the product was useful in coatings, adhesives, and moldings. Thus, a 1:1 stoichiometric mixt. of octafluorobiphenyl 4,4'-diglycidyl ether [23779-39-7] and 4,4'-dihydroxyoctafluorobiphenyl [2200-70-6] was heated 2 hr at 100.deg., 5 hr at 120.deg., and 24 hr at 165.deg. to give a light amber, solid polyol with epoxy equiv. wt. 4000 and sol. in acetone; 8 addnl. polyols from 4 addnl. diglycidyl ethers and 3 addnl. diols were prepd.

IT **29934-09-6P 29934-10-9P 31257-80-4P**
42263-55-8P 42263-56-9P 42263-57-0P
42263-58-1P
RL: PREP (Preparation)
(prepn. of)

RN 29934-09-6 HCAPLUS
CN 1,5-Pentanediol, 2,2,3,3,4,4-hexafluoro-, polymer with 2,2'-[(2,2',3,3',5,5',6,6'-octafluoro[1,1'-biphenyl]-4,4'-diyl)bis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

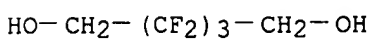
CM 1

CRN 23779-39-7
CMF C18 H10 F8 O4



CM 2

CRN 376-90-9
CMF C5 H6 F6 O2

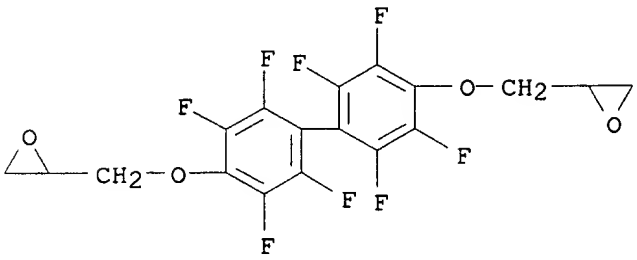


RN 29934-10-9 HCAPLUS
CN [1,1'-Biphenyl]-4,4'-diol, 2,2',3,3',5,5',6,6'-octafluoro-, polymer with

2,2'-[(2,2',3,3',5,5',6,6'-octafluoro[1,1'-biphenyl]-4,4'-diyl)bis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

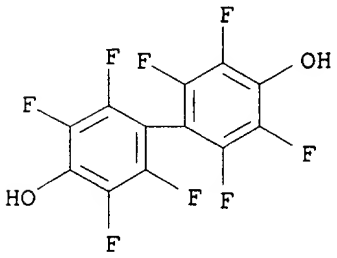
CM 1

CRN 23779-39-7
CMF C18 H10 F8 O4



CM 2

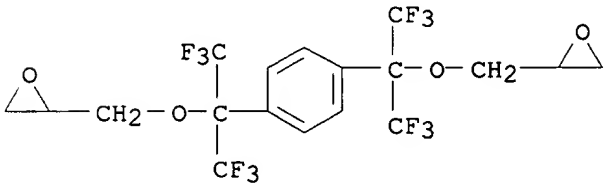
CRN 2200-70-6
CMF C12 H2 F8 O2



RN 31257-80-4 HCAPLUS
CN 1,5-Pentanediol, 2,2,3,3,4,4-hexafluoro-, polymer with 2,2'-[1,4-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

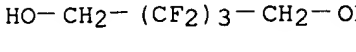
CRN 26146-94-1
CMF C18 H14 F12 O4



CM 2

CRN 376-90-9

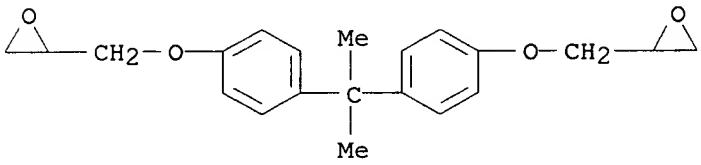
CMF C5 H6 F6 O2



RN 42263-55-8 HCAPLUS
CN 1,5-Pentanediol, 2,2,3,3,4,4-hexafluoro-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

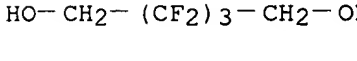
CM 1

CRN 1675-54-3
CMF C21 H24 O4



CM 2

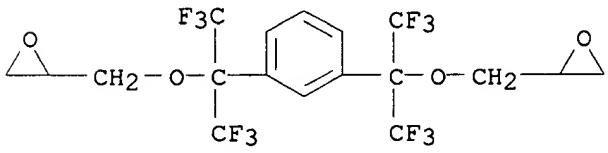
CRN 376-90-9
CMF C5 H6 F6 O2



RN 42263-56-9 HCAPLUS
CN 1,3-Benzenedimethanol, .alpha.,.alpha.,.alpha.',.alpha.'-tetrakis(trifluoromethyl)-, polymer with 2,2'-[1,3-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis[oxirane] (9CI) (CA INDEX NAME)

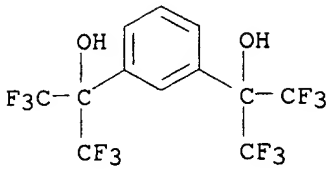
CM 1

CRN 26146-93-0
CMF C18 H14 F12 O4



CM 2

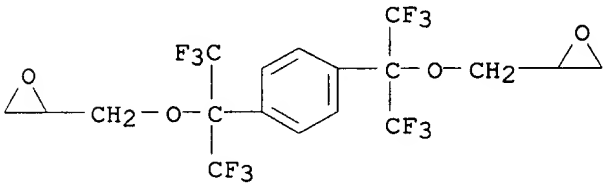
CRN 802-93-7
CMF C12 H6 F12 O2



RN 42263-57-0 HCAPLUS
CN 1,4-Benzenedimethanol, .alpha.,.alpha.,.alpha.',.alpha.'-tetrakis(trifluoromethyl)-, polymer with 2,2'-[1,4-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis[oxirane] (9CI) (CA INDEX NAME)

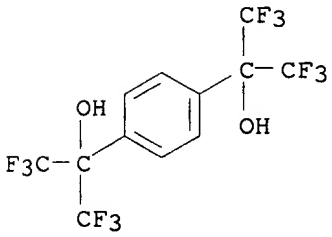
CM 1

CRN 26146-94-1
CMF C18 H14 F12 O4



CM 2

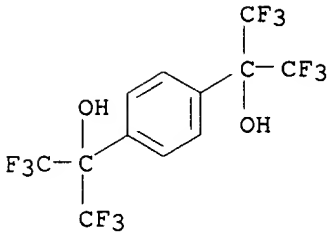
CRN 1992-15-0
CMF C12 H6 F12 O2



RN 42263-58-1 HCAPLUS
CN 1,4-Benzenedimethanol, .alpha.,.alpha.,.alpha.',.alpha.'-tetrakis(trifluoromethyl)-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

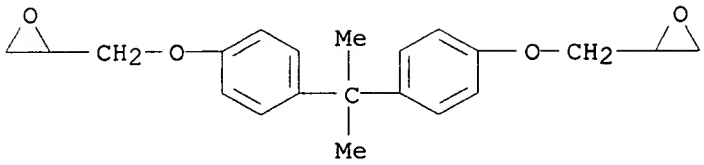
CM 1

CRN 1992-15-0
CMF C12 H6 F12 O2



CM 2

CRN 1675-54-3
CMF C21 H24 O4



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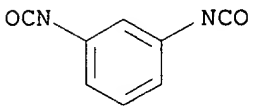
L12 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1988:151587 HCAPLUS
DN 108:151587
TI Crosslinking of epoxy resins by polyfunctional perfluoro polyethers
IN Re, Alberto; Donati, Gianni
PA Ausimont S.p.A., Italy
SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 249048	A2	19871216	EP 1987-107024	19870514	
	EP 249048	A3	19900620			
	EP 249048	B1	19921014			
	R: AT, BE, DE, ES, FR, GB, IT, NL, SE					
	ZA 8703313	A	19871230	ZA 1987-3313	19870508	
	US 4816545	A	19890328	US 1987-47108	19870508	<--
	JP 63022823	A2	19880130	JP 1987-113732	19870512	
	CN 87104186	A	19880406	CN 1987-104186	19870513	
	CN 1016431	B	19920429			
	SU 1660584	A3	19910630	SU 1987-4202604	19870513	
	AT 81516	E	19921015	AT 1987-107024	19870514	
PRAI	IT 1986-20434		19860514			
	EP 1987-107024		19870514			

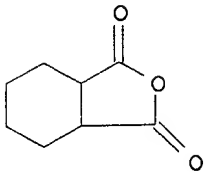
AB F-free epoxy resins are cured by perfluoro polyethers contg. groups reactive with epoxy groups to give resins which exhibit water and oil repellency, low friction coeff., and good dielec. properties. A mixt. of 100 g Epikote 828 and 81.1 g RCH2O(C2F4O)m(CF2O)nCH2R (R = p-aminophenoxy; mol. wt. 624) contg. a catalyst (Dabco) was cured 2 h at 70.degree. and 4 h at 150.degree. to give a resin having water contact angle 88.degree., dielec. const. 3.2, vol. resistivity 8 .times. 1015 .OMEGA.-cm, and water absorption 0.1% (96 h at 70.degree. and 100% relative humidity).

IT **26471-62-5D**, TDI, perfluoro polyether derivs.
RL: USES (Uses)
(curing by, of epoxy resins)
RN 26471-62-5 HCAPLUS
CN Benzene, 1,3-diisocyanatomethyl- (9CI) (CA INDEX NAME)



D1—Me

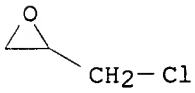
IT **85-42-7**, Hexahydrophthalic anhydride
RL: USES (Uses)
(curing of epoxy resins by fluoro polyether deriv. and)
RN 85-42-7 HCAPLUS
CN 1,3-Isobenzofurandione, hexahydro- (9CI) (CA INDEX NAME)



IT **25068-38-6**, Epikote 828
RL: USES (Uses)
(curing of, by fluoro polyether derivs.)
RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

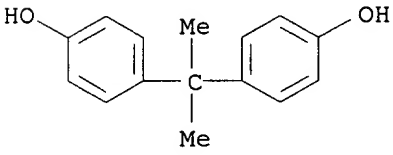
CM 1

CRN 106-89-8
CMF C3 H5 Cl O

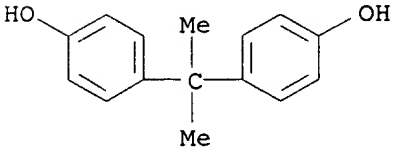


CM 2

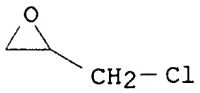
CRN 80-05-7
CMF C15 H16 O2



IT **80-05-7DP**, polymers with epichlorohydrin and fluoro polyether derivs. **106-89-8DP**, polymers with bisphenol A and fluoro polyether derivs.
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PREP (Preparation); PROC (Process)
(prepn. and properties of)
RN 80-05-7 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis- (9CI) (CA INDEX NAME)



RN 106-89-8 HCAPLUS
CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



Cited by EPO

L12 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1988:7572 HCAPLUS
DN 108:7572
TI Fluorinated epoxy-fluorocarbon coating compositions
PA Standard Oil Co. (Ohio), USA
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62148574	A2	19870702	JP 1986-290290	19861205
	EP 230112	A2	19870729	EP 1986-309297	19861128 <--
	EP 230112	A3	19871125		
	EP 230112	B1	19900502		
	R: DE, FR, GB				
	AU 8666430	A1	19870625	AU 1986-66430	19861211
	BR 8606274	A	19871006	BR 1986-6274	19861218
	CN 86108642	A	19870722	CN 1986-108642	19861222
	US 5075378	A	19911224	US 1987-65750	19870624
PRAI	US 1985-812222		19851223		

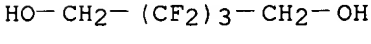
AB The title solid compns. forming anticorrosive hydrophobic coatings with excellent impact resistance comprise fluorocarbon polymer 5-24, epoxy resin 25-95, and fluorinated hardener 10-70%. Thus, a mixt. of 57.0 g Epon 828 and 0.3 g Florad FC-430 was rapidly mixed with 31.7 g 2,2,3,3,4,4-hexafluoro-1,5-pentanediol for 15 min and then with 10 g PTFE powder for 15-30 min, mixed with 1% Me2NH, coated on a steel plate at 90.degree., and cured at 125.degree., and the process was repeated 4 times to obtain a 0.1775 mm coating.

IT **111843-25-5**
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, solid, contg. PTFE, anticorrosive, impact-resistant, hydrophobic)

RN 111843-25-5 HCAPLUS
CN 1,5-Pentanediol, 2,2,3,3,4,4-hexafluoro-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

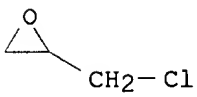
CM 1

CRN 376-90-9
CMF C5 H6 F6 O2



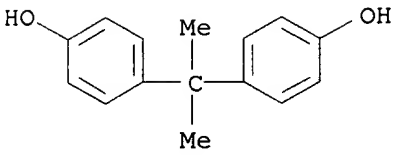
CM 2

CRN 106-89-8
CMF C3 H5 Cl O



CM 3

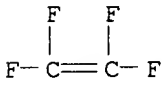
CRN 80-05-7
CMF C15 H16 O2



IT **9002-84-0**, PTFE
RL: USES (Uses)
(fluorinated epoxy coating materials contg. DLX 6000, solid, anticorrosive, impact-resistant, hydrophobic)
RN 9002-84-0 HCAPLUS
CN Ethene, tetrafluoro-, homopolymer (9CI) (CA INDEX NAME)

CM 1

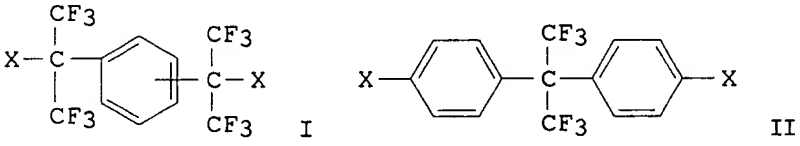
CRN 116-14-3
CMF C2 F4



L98 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2002 ACS
AN 1991:418674 HCAPLUS
DN 115:18674
TI Derivatives of 1,3- or 1,4-bis(hexafluoroisopropyl)benzene, or 2,2-bisphenylhexafluoropropane, ink-repellent **agent** containing such deriv. compound, **head** for **ink-jet** recording treated with such ink-repellent **agent** and **ink jet** recording device equipped with such **head**
IN Ebisawa, Isao; Noguchi, Hiromichi
PA Canon K. K., Japan
SO Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C07D303-27
ICS C07C069-653; C07C069-76; B41J003-00
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 25, 42
FAN.CNT 1

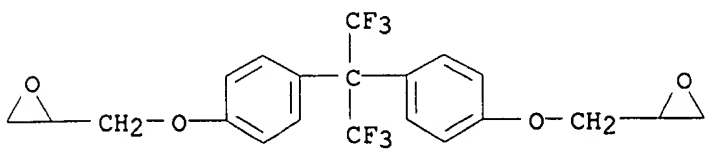
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 388979	A2	19900926	EP 1990-105574	19900323
	EP 388979	A3	19910206		
	JP 03007781	A2	19910114	JP 1990-62842	19900315
	JP 11286114	A2	19991019	JP 1999-9512	19990118
	JP 3217761	B2	20011015		
PRAI	JP 1989-70548	A	19890324		
	JP 1990-62842	A	19900315		

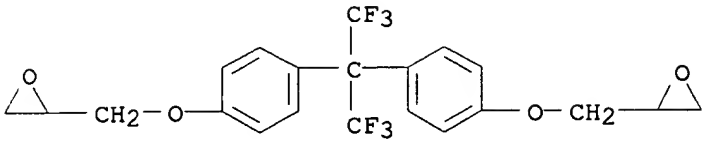
OS MARPAT 115:18674
GI



I II

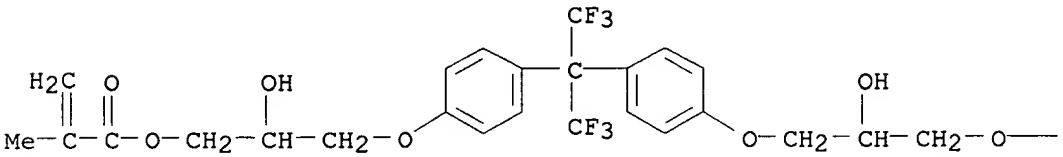
AB The title derivs. are I, or II [X = epoxy group or CH2:C(Y)CO2(CH2CHOHCH2O)m(CO)n; Y = H, Me; m,n = 0 or 1, when m = 0, n is also 0]. The derivs. are used as ink-repellent **agent** or **ink-jet** printing **head** in recording app.
IT **2994-63-0 69709-05-3 108050-41-5 108050-42-6 109033-14-9 113962-81-5 122715-22-4 122715-23-5 134426-39-4**
RL: USES (Uses)
(ink repellent, on **ink-jet** printing **head**)
RN 2994-63-0 HCAPLUS
CN Oxirane, 2,2'-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis(4,1-phenyleneoxymethylene)]bis- (9CI) (CA INDEX NAME)



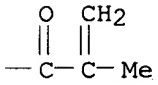


RN 69709-05-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

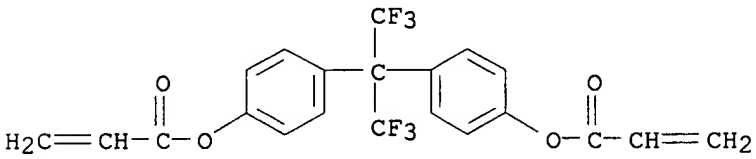
PAGE 1-A



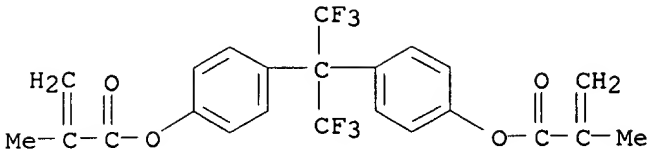
PAGE 1-B



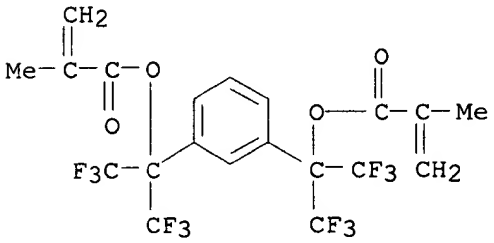
RN 108050-41-5 HCAPLUS
CN 2-Propenoic acid, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]di-4,1-phenylene ester (9CI) (CA INDEX NAME)



RN 108050-42-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]di-4,1-phenylene ester (9CI) (CA INDEX NAME)

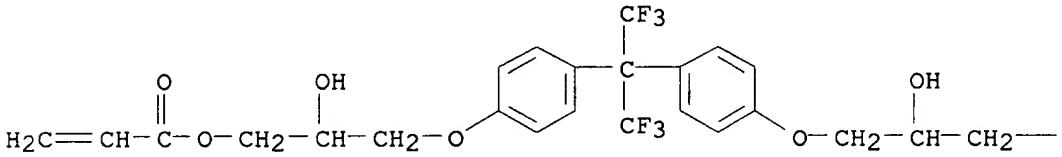


RN 109033-14-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] ester (9CI) (CA INDEX NAME)

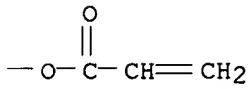


RN 113962-81-5 HCAPLUS
CN 2-Propenoic acid, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A

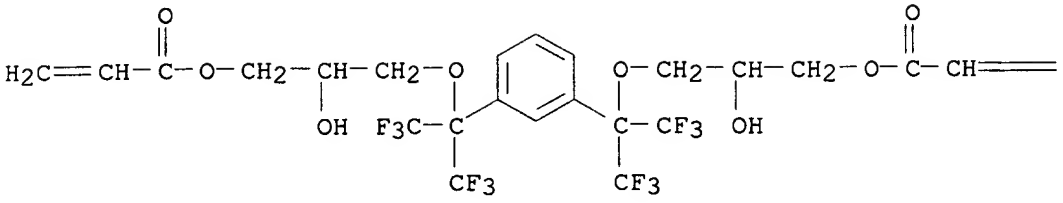


PAGE 1-B



RN 122715-22-4 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

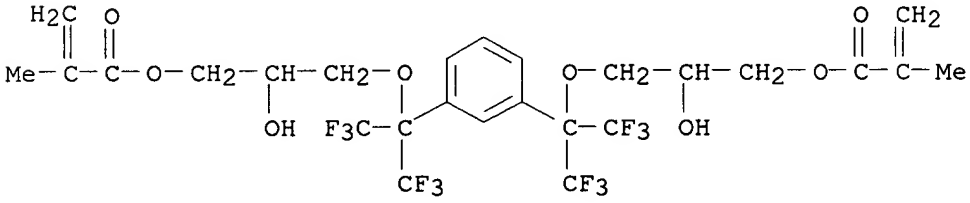
PAGE 1-A



PAGE 1-B

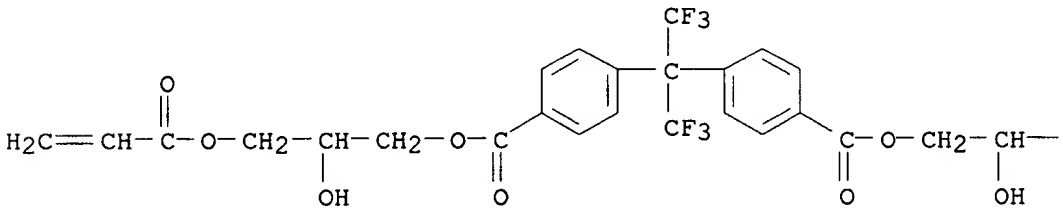
$=CH_2$

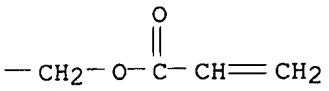
RN 122715-23-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



RN 134426-39-4 HCAPLUS
CN Benzoic acid, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, bis[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl] ester (9CI) (CA INDEX NAME)

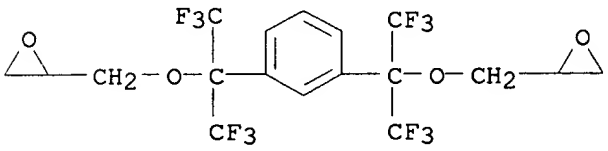
PAGE 1-A



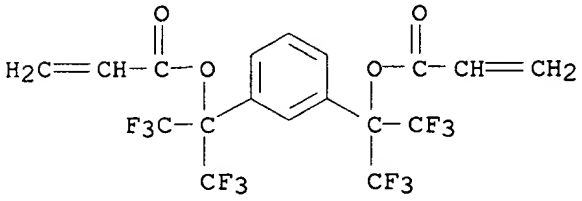


IT **26146-93-0P 77974-91-5P 134426-38-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and use of, as ink-repellent, on **ink-jet** printing **head**)

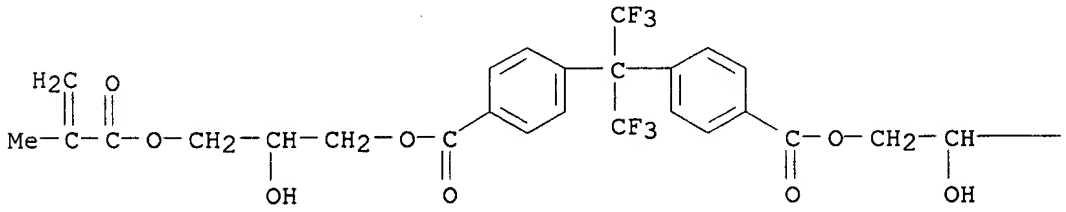
RN 26146-93-0 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis- (9CI) (CA INDEX NAME)

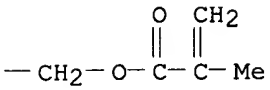


RN 77974-91-5 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] ester (9CI) (CA INDEX NAME)



RN 134426-38-3 HCAPLUS
CN Benzoic acid, 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, bis[2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl] ester (9CI) (CA INDEX NAME)





L93 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2002 ACS
AN 1987:524699 HCAPLUS
DN 107:124699
TI Process for producing a liquid jet recording **head**
IN Noguchi, Hiromichi
PA Canon K. K. , Japan
SO U.S., 11 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4657631	A	19870414	US 1985-811460	19851220
	US 4775445	A	19881004	US 1987-1174	19870107
PRAI	JP 1984-274689		19841228		
	US 1985-811460		19851220		

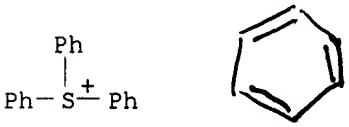
AB A liq. jet recording **head** comprised of a liq. **flow path**, a liq. ejection port, and a liq. ejection energy-generating member arranged along the liq. **flow path** is comprised of forming a solid layer comprised of pos. photoresist on a substrate in accordance with the pattern of the liq. **flow path**, filling up the recess on the substrate where the solid layer is not present with a liq. **flow path** wall-forming material, and removing the solid layer from the substrate. The recording **head** thus produced is inexpensive, precise, highly reliable, and excellent in mech. strength and chem. resistance. A pos. photoresist layer (OZATEC R225) was formed on a glass substrate provided with electrothermal transducers as liq. ejecting energy-generating members, exposed through a photomask to UV, developed with an aq. caustic soda soln., sputtered with a Cr wall layer, electrolytically plated with a Ni wall layer, and treated with an EtOH-dodecylbenzenesulfonic acid mixt. to remove the resist layer to give a liq. jet recording **head**.

IT **57835-99-1**
RL: USES (Uses)
(curable resin compns. contg. **epoxy resins** and, for photofabrication of **ink-jet** recording **heads** using pos. photoresist)

RN 57835-99-1 HCAPLUS
CN Sulfonium, triphenyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

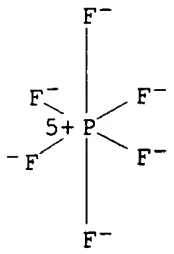
CM 1

CRN 18393-55-0
CMF C18 H15 S



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



IT **95078-13-0**
RL: USES (Uses)
(curable resin compns. contg., for photofabrication of **ink-jet** recording **heads** using pos. photoresist)
RN 95078-13-0 HCAPLUS

L98 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2002 ACS
AN 1987:524699 HCAPLUS
DN 107:124699
TI Process for producing a liquid jet recording **head**
IN Noguchi, Hiromichi
PA Canon K. K. , Japan
SO U.S., 11 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM B44C001-22
ICS B29C017-08; C03C015-00; C03C025-06
NCL 156655000
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4657631	A	19870414	US 1985-811460	19851220
	US 4775445	A	19881004	US 1987-1174	19870107
PRAI	JP 1984-274689		19841228		
	US 1985-811460		19851220		

AB A liq. jet recording **head** comprised of a liq. **flow path**, a liq. ejection port, and a liq. ejection energy-generating member arranged along the liq. **flow path** is comprised of forming a solid layer comprised of pos. photoresist on a substrate in accordance with the pattern of the liq. **flow path**, filling up the recess on the substrate where the solid layer is not present with a liq. **flow path** wall-forming material, and removing the solid layer from the substrate. The recording **head** thus produced is inexpensive, precise, highly reliable, and excellent in mech. strength and chem. resistance. A pos. photoresist layer (OZATEC R225) was formed on a glass substrate provided with electrothermal transducers as liq. ejecting energy-generating members, exposed through a photomask to UV, developed with an aq. caustic soda soln., sputtered with a Cr wall layer, electrolytically plated with a Ni wall layer, and treated with an EtOH-dodecylbenzenesulfonic acid mixt. to remove the resist layer to give a liq. jet recording **head**.

ST **ink jet** recording **head** prepn; photosensitive resin **ink jet head**; pos photoresist **ink jet head**

IT Printing apparatus
(**ink-jet, heads**, photofabrication of, using pos. photoresists)

IT **57835-99-1**
RL: USES (Uses)
(**curable** resin compns. contg. **epoxy resins** and, for photofabrication of **ink-jet** recording **heads** using pos. photoresist)

IT 37189-54-1 39701-29-6 80940-81-4, Acrysirup SY-105 **95078-13-0** 95078-16-3 110158-77-5
RL: USES (Uses)
(**curable** resin compns. contg., for photofabrication of **ink-jet** recording **heads** using pos. photoresist)

IT 110158-67-3
RL: USES (Uses)
(in photofabrication of **ink-jet** recording **heads**)

IT 7440-02-0, Nickel, uses and miscellaneous
RL: USES (Uses)
(**ink-jet** recording **heads** with walls of

chromium and, photofabrication of, using pos. photoresist)

IT 7440-47-3, Chromium, uses and miscellaneous
RL: USES (Uses)
(**ink-jet** recording **heads** with walls of nickel and, photofabrication of, using pos. photoresist)

IT 9003-09-2, Poly(methyl vinyl ether) 9003-32-1, Poly(ethyl acrylate)
RL: USES (Uses)
(pos. photoresist contg. trihydroxybenzophenone naphthoquinonediazidosulfonate and, in photofabrication of **ink-jet** recording **heads**)

IT 107853-40-7
RL: USES (Uses)
(pos. photoresist from cresol-formaldehyde copolymer and, in photofabrication of **ink-jet** recording **heads**)

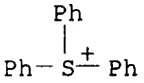
IT 9016-83-5
RL: USES (Uses)
(pos. photoresist from trihydroxybenzophenone naphthoquinonediazidosulfonate and, in photofabrication of **ink-jet** recording **heads**)

IT **57835-99-1**
RL: USES (Uses)
(**curable** resin compns. contg. **epoxy resins** and, for photofabrication of **ink-jet** recording **heads** using pos. photoresist)

RN 57835-99-1 HCAPLUS
CN Sulfonium, triphenyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

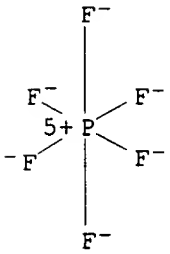
CM 1

CRN 18393-55-0
CMF C18 H15 S



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



IT **95078-13-0**
RL: USES (Uses)
(**curable** resin compns. contg., for photofabrication of **ink-jet** recording **heads** using pos. photoresist)
RN 95078-13-0 HCAPLUS

L75 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1989:479484 HCAPLUS
DN 111:79484
TI Fluorine-containing alicyclic and aromatic cyclic compounds, process, and adhesive composition containing the compounds
IN Maruno, Tohru; Nakamura, Kozaburo; Murata, Norio; Omori, Akira; Shimizu, Yoshiki; Kubo, Motonobu; Kobayashi, Hideo
PA Daikin Industries, Ltd., Japan; Nippon Telegraph and Telephone K. K.
SO Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 295639	A2	19881221	EP 1988-109495	19880614
	EP 295639	A3	19891102		
	EP 295639	B1	19931201		
	R: DE, FR, GB, IT, NL				
	JP 01085949	A2	19890330	JP 1988-146243	19880614
	JP 08030028	B4	19960327		
	US 5157148	A	19921020	US 1990-587131	19901018
	US 5202360	A	19930413	US 1991-737577	19910729
PRAI	JP 1987-149784		19870615		
	JP 1987-308556		19871208		
	US 1988-205853		19880613		
	US 1990-586846		19901018		

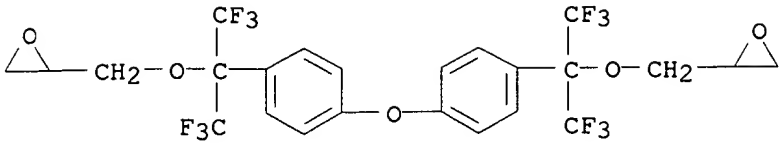
AB Heat- and water-resistant adhesive compns. with low refractive index, useful for optical parts, comprise epoxides RCH2O[C(CF3)2MC(CF3)2OCH2CH(OH)CH2O]nC(CF3)2MC(CF3)2OCH2R (I; R = glycidyl; M = divalent group of .gtoreq.1 alicyclic or arom. hydrocarbon, may be linked with O, S, CH2, or may form a condensed ring; n = 0 or pos. no.) or epoxy acrylates I (R = CH2:CYCO2CH2CH(OH)-, M and n are as above, Y = H or Me) and photopolymn. **initiator** or **curing agent**. The reaction of 4 mol hexafluoroacetone with 2 mol Ph2O at 40-50.degree. in the presence of AlCl3 gave a diol (b.p. 144-146.degree.) which was further reacted with epichlorohydrin to give the corresponding diglycidyl ether compd. I (R = glycidyl; M = p-C6H4O-pC6H4), (II). A compn. contg. II (n = 0.2) (epoxy equiv. 360, refractive index 1.47) 70, HCF2CF2CH2OR1 (R1 = glycidyl) 30, and hexafluorophosphate triphenylsulfonium 3 parts was **cured** at 60.degree. using 100 mJ/cm2 UV light to give a **cured** product with refractive index 1.494, adhesion (to glass at 23.degree.) 147 kg/cm2, and heat resistance (time of sepn. of adhesive from glass in 80.degree. water) >24 h, vs. 1.564, 110, and >24, resp., for amine-**cured** Epikote 828.

IT **122106-58-5 122108-53-6**
RL: USES (Uses)
(adhesive, with low refractive index, heat-resistant with good adhesion to glass)

RN 122106-58-5 HCAPLUS
CN Oxirane, 2,2'-[oxybis[4,1-phenylene[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis-, polymer with [(2,2,3,3-tetrafluoropropoxy)methyl]oxirane (9CI) (CA INDEX NAME)

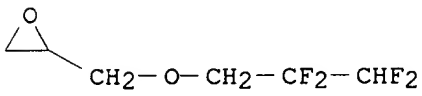
CM 1

CRN 121771-44-6
CMF C24 H18 F12 O5



CM 2

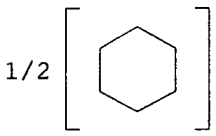
CRN 19932-26-4
CMF C6 H8 F4 O2

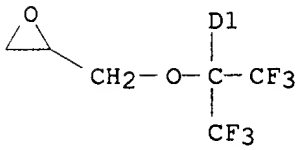


RN 122108-53-6 HCAPLUS
CN Oxirane, 2,2'-[cyclohexanediylbis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis-, polymer with [(2,2,3,3-tetrafluoropropoxy)methyl]oxirane and 2,2'-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis(4,1-phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

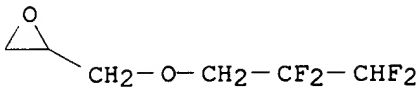
CRN 121752-11-2
CMF C18 H20 F12 O4
CCI IDS
CDES 8:ID





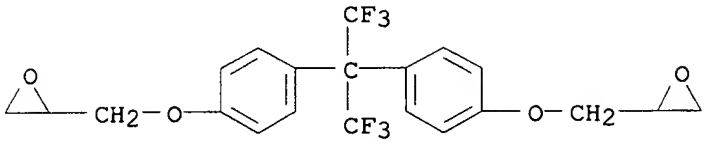
CM 2

CRN 19932-26-4
CMF C6 H8 F4 O2



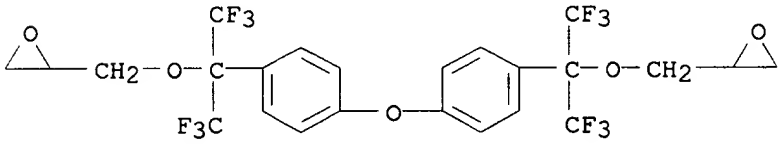
CM 3

CRN 2994-63-0
CMF C21 H18 F6 O4



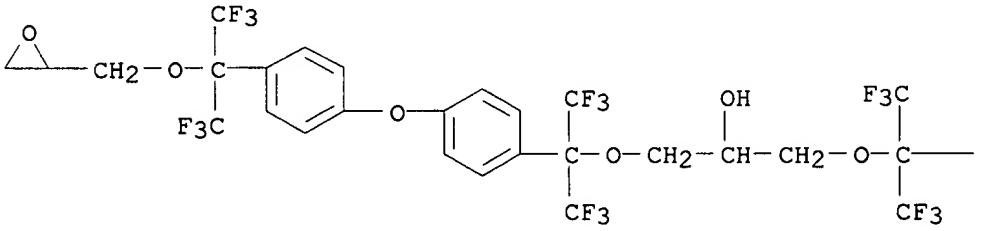
IT **121771-44-6P 122085-48-7P 122085-49-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and **reaction** of, with acrylic acid or methacrylic acid)

RN 121771-44-6 HCAPLUS
CN Oxirane, 2,2'-[oxybis[4,1-phenylene[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis- (9CI) (CA INDEX NAME)

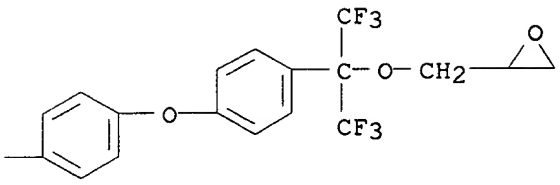


RN 122085-48-7 HCAPLUS
CN 2-Propanol, 1,3-bis[2,2,2-trifluoro-1-[4-[4-[2,2,2-trifluoro-1-(oxiranylmethoxy)-1-(trifluoromethyl)ethyl]phenoxy]phenyl]-1-(trifluoromethyl)ethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

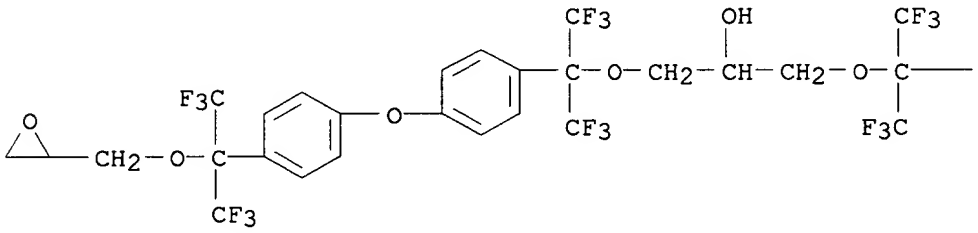


PAGE 1-B

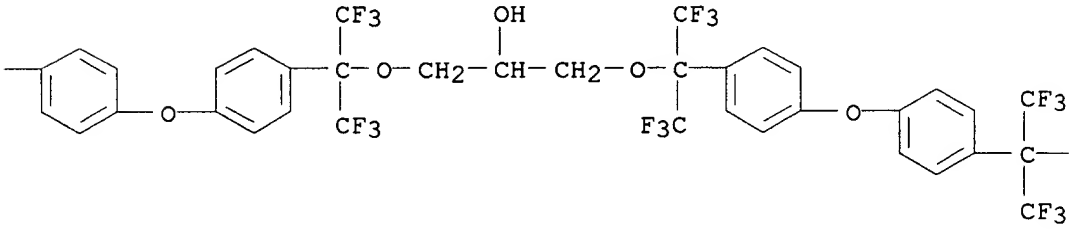


RN 122085-49-8 HCAPLUS
CN 2-Propanol, 1,1'-[oxybis[4,1-phenylene[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxy]]bis[3-[2,2,2-trifluoro-1-[4-[4-[2,2,2-trifluoro-1-(oxiranylmethoxy)-1-(trifluoromethyl)ethyl]phenoxy]phenyl]-1-(trifluoromethyl)ethoxy]- (9CI) (CA INDEX NAME)

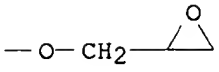
PAGE 1-A



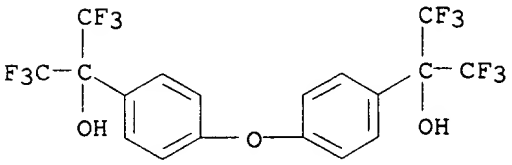
PAGE 1-B



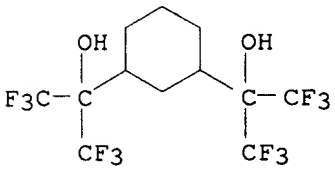
PAGE 1-C



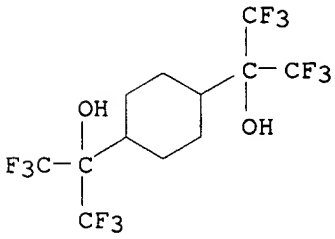
IT **2093-04-1P 122085-42-1P 122085-43-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and **reaction** of, with epichlorohydrin)
RN 2093-04-1 HCAPLUS
CN Benzenemethanol, 4,4'-oxybis[.alpha.,.alpha.-bis(trifluoromethyl)- (9CI) (CA INDEX NAME)



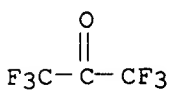
RN 122085-42-1 HCAPLUS
CN 1,3-Cyclohexanedimethanol, .alpha.,.alpha.,.alpha.',.alpha.'-tetrakis(trifluoromethyl)- (9CI) (CA INDEX NAME)



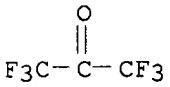
RN 122085-43-2 HCAPLUS
CN 1,4-Cyclohexanedimethanol, .alpha.,.alpha.,.alpha.',.alpha.'-tetrakis(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT **684-16-2**, Hexafluoroacetone
RL: RCT (Reactant)
(**reaction** of, with benzene)
RN 684-16-2 HCAPLUS
CN 2-Propanone, 1,1,1,3,3,3-hexafluoro- (8CI, 9CI) (CA INDEX NAME)



L75 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1976:151392 HCAPLUS
DN 84:151392
TI A fluoro-anhydride **curing agent** for heavily fluorinated **epoxy resins**
AU Griffith, James R.; O'Rear, Jacques G.; Reardon, Joseph P.
CS Nav. Res. Lab., Washington, D. C., USA
SO Polym. Sci. Technol. (1975), 9A(Adhes. Sci. Technol.), 429-35
CODEN: POSTB5
DT Journal
LA English
AB The anhydride 4-(2-hydroxy-2-hexafluoropropyl)phthalic anhydride (I) [58851-14-2], prepd. from o-xylene [95-47-6] and hexafluoroacetone [684-16-2], is a suitable **crosslinking** agent for fluorinated **epoxy resins**.
IT **684-16-2**
RL: RCT (Reactant)
(**reaction** of, with xylene)
RN 684-16-2 HCAPLUS
CN 2-Propanone, 1,1,1,3,3,3-hexafluoro- (8CI, 9CI) (CA INDEX NAME)



L75 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1984:157517 HCAPLUS
DN 100:157517
TI Syntheses and properties of **cured epoxy resins** containing the perfluorobutenyloxy group. I. **Epoxy resin cured** with perfluorobutenyloxyphthalic anhydride
AU Sasaki, S.; Nakamura, K.
CS Musashino Electr. Commun. Lab., Nippon Telegr. Teleph. Public Corp., Musashino, 180, Japan
SO J. Polym. Sci., Polym. Chem. Ed. (1984), 22(3), 831-40
CODEN: JPLCAT; ISSN: 0449-296X
DT Journal
LA English
AB 4-[Perfluoro-1,3-dimethyl-2-(1-methylethyl)-1-butenyl]oxyphthalic anhydride (I) [80693-44-3] was prepd. as a new **curing agent** for **epoxy resins**, and the properties of I-**cured epoxy resins** were investigated. I was prepd. in good yield by dehydrating ring closure of **perfluorobutenyloxyphthalic** acid, which was obtained by **reacting** hexafluoropropene trimers with 4-hydroxyphthalic acid. **Epoxy resins cured** with I have boiling water absorption 0.45%, excellent heat resistance, and crit. surface tension approx. the same as for PTFE.

L108 ANSWER 28 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1983:524202 HCAPLUS
DN 99:124202
TI Radiation **curable epoxy**/acrylate-hydroxyl coating compositions
IN Nagy, Frank Andrew
PA Mobil Oil Corp. , USA
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT Patent
LA English
IC C09D003-58; C09D003-80; C08F283-10
CC 42-9 (Coatings, Inks, and Related Products)
FAN.CNT 1

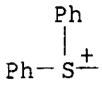
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 82603	A2	19830629	EP 1982-306283	19821125
EP 82603	A3	19850123		
R: BE, DE, FR, GB, IT, NL				
JP 58111863	A2	19830704	JP 1982-224792	19821221
PRAI US 1981-333367		19811222		

AB Mixts. of **epoxy resins** and (meth)acrylic monomers can be **cured** by UV or ionizing radiation in the presence of Group VIa onium salts when the (meth)acrylic monomers also contain OH functionality. Thus, a compn. contg. FC-508 (triphenylsulfonium hexafluorophosphate) [**57835-99-1**] catalyst 5, Epon 828 [**25068-38-6**] **epoxy resin** 48, Epon 828 etherified stoichiometrically with hydroxyethyl acrylate 23.3, and hydroxyethyl acrylate-propylene oxide adduct [60857-97-8] 23.3% was applied to an Al substrate, **cured** by exposure to UV light, and baked for 5 min at 175.degree.. The compn. **cured** well as both thick and thin films, whereas without the OH-**functional** monomer the **cure** of thick films was poor.

T **57835-99-1**
RL: CAT (Catalyst use); USES (Uses)
(**catalysts**, radiation-**curable epoxy resin coating** compns. contg.)
RN 57835-99-1 HCAPLUS
CN Sulfonium, triphenyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

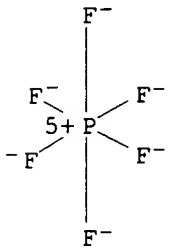
CM 1

CRN 18393-55-0
CMF C18 H15 S



CM 2

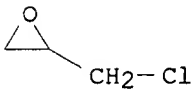
CRN 16919-18-9
CMF F6 P
CCI CCS



IT **25068-38-6 25068-38-6D,** reaction products with hydroxyethyl acrylate **25085-98-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, radiation-**curable,** contg. hydroxyl functional acrylic monomers)
RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

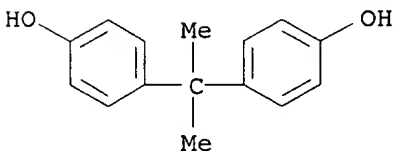
CM 1

CRN 106-89-8
CMF C3 H5 Cl O



CM 2

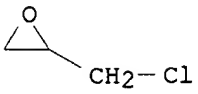
CRN 80-05-7
CMF C15 H16 O2



RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

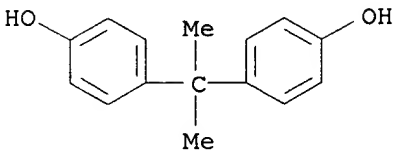
CM 1

CRN 106-89-8
CMF C3 H5 Cl O



CM 2

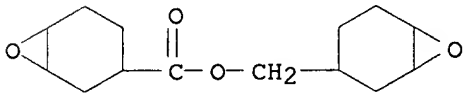
CRN 80-05-7
CMF C15 H16 O2



RN 25085-98-7 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2386-87-0
CMF C14 H20 O4



L75 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1979:7133 HCAPLUS
DN 90:7133
TI Imidazole type **curing agents** and latent systems containing them
IN Thom, Karl Friedrich
PA Minnesota Mining and Mfg. Co., USA
SO U.S., 8 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4101514	A	19780718	US 1976-723601	19760915
US 4105667	A	19780808	US 1970-55981	19700717

PRAI US 1970-55981 19700717

AB Metal perfluoroalkyl imidazole complexes, MRn(SO3R1)m, (M=metal; R=imidazole; n=coordination no. of M; R1 = perfluoroalkyl; m = valence of M), are efficient latent **curing agents** with low exotherms for **epoxy resins**. Thus, Epon 828 (I) [**25068-38-6**] contg. 10 parts tetraimidazole copper trifluoromethylsulfonate [68495-68-1] per 100 parts resin was heated to 150.degree. in 60 s to give a peak exotherm of 209.degree., while I contg. a prior art compd. Cu trifluoromethylsulfonate gave a peak exotherm 308.degree..

IT **25068-38-6 25085-98-7**
RL: USES (Uses)
(**crosslinking** agents for, metal perfluoroalkylsulfonate imidazole complexes as)

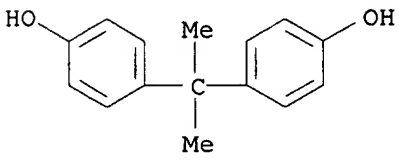
RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8
CMF C3 H5 Cl O

CM 2

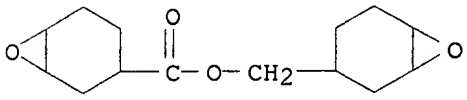
CRN 80-05-7
CMF C15 H16 O2



RN 25085-98-7 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2386-87-0
CMF C14 H20 O4



L108 ANSWER 25 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1986:516751 HCAPLUS
DN 105:116751
TI Fluoropolymer-acrylic **polymer** blend coatings
IN Omori, Akira; Tomihashi, Nobuyuki; Inukai, Hiroshi; Shimizu, Yoshiki
PA Daikin Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L027-16
ICS C09D003-81
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61051045	A2	19860313	JP 1985-44369	19850306
	US 4581412	A	19860408	US 1985-751409	19850703
PRAI	JP 1983-175123		19830921		
	US 1984-653005		19840921		
	JP 1985-44369		19850306		

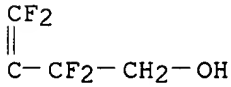
AB A blend of a vinylidene fluoride copolymer and an acrylic polymer both contg. functional groups is highly compatible and is useful as a room-temp.-**curable** coating material giving a layer maintaining high gloss for a long time. Thus, 20 parts compn. comprising 50% copolymer from 70:10:20 mol ratio vinylidene fluoride-CF2:CFCF2CH2OH-chlorotrifluoroethylene mixt. in MEK 20, 50g copolymer from 80:10:10 mol ratio Me methacrylate-hydroxyethyl methacrylate-Et methacrylate mixt. in PhMe 20, TiO2 6, PhMe 10, and dibutyltin dilaurate 0.005 part was mixed with 4.5 parts Coronate EH (hexamethylene diisocyanate trimer) and topcoated on an undercoated Al plate to a thickness of 25 .mu. (dry) to give a layer exhibiting pencil hardness H, crosscut adhesion test 100/100, 60.degree. gloss 81, and retention of gloss after 4000 h in a weatherometer 93%.

T **97168-11-1 97168-12-2 97168-15-5**
97168-19-9 97168-22-4 104033-04-7
104033-05-8 104301-73-7
RL: USES (Uses)
(**functional** group-contg. acrylic **polymer** blends, contg. polyisocyanates, **coatings**, room-temp.-**curable**, with high gloss)

RN 97168-11-1 HCAPLUS
CN 3-Buten-1-ol, 2,2,3,4,4-pentafluoro-, polymer with 1,1-difluoroethene (9CI) (CA INDEX NAME)

CM 1

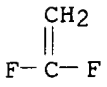
CRN 97168-10-0
CMF C4 H3 F5 O



CM 2

CRN 75-38-7

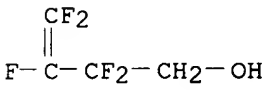
CMF C2 H2 F2



RN 97168-12-2 HCAPLUS
CN 3-Buten-1-ol, 2,2,3,4,4-pentafluoro-, polymer with 1,1-difluoroethene and tetrafluoroethene (9CI) (CA INDEX NAME)

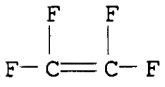
CM 1

CRN 97168-10-0
CMF C4 H3 F5 O



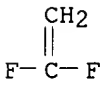
CM 2

CRN 116-14-3
CMF C2 F4



CM 3

CRN 75-38-7
CMF C2 H2 F2

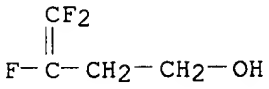


RN 97168-15-5 HCAPLUS
CN 3-Buten-1-ol, 3,4,4-trifluoro-, polymer with chlorotrifluoroethene and 1,1-difluoroethene (9CI) (CA INDEX NAME)

CM 1

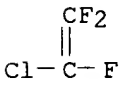
CRN 97168-13-3

CMF C4 H5 F3 O



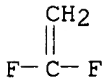
CM 2

CRN 79-38-9
CMF C2 Cl F3



CM 3

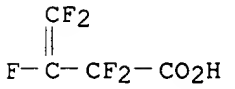
CRN 75-38-7
CMF C2 H2 F2



RN 97168-19-9 HCAPLUS
CN 3-Butenoic acid, 2,2,3,4,4-pentafluoro-, polymer with chlorotrifluoroethene and 1,1-difluoroethene (9CI) (CA INDEX NAME)

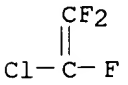
CM 1

CRN 44969-80-4
CMF C4 H F5 O2



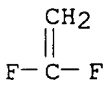
CM 2

CRN 79-38-9
CMF C2 Cl F3



CM 3

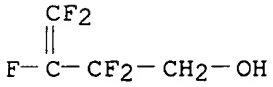
CRN 75-38-7
CMF C2 H2 F2



RN 97168-22-4 HCAPLUS
CN 3-Buten-1-ol, 2,2,3,4,4-pentafluoro-, polymer with chlorotrifluoroethene and 1,1-difluoroethene (9CI) (CA INDEX NAME)

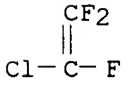
CM 1

CRN 97168-10-0
CMF C4 H3 F5 O



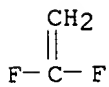
CM 2

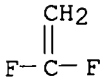
CRN 79-38-9
CMF C2 Cl F3



CM 3

CRN 75-38-7
CMF C2 H2 F2

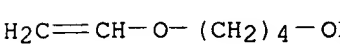




RN 104033-04-7 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with chlorotrifluoroethene and 1,1-difluoroethene (9CI) (CA INDEX NAME)

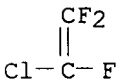
CM 1

CRN 17832-28-9
CMF C6 H12 O2



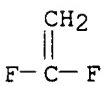
CM 2

CRN 79-38-9
CMF C2 Cl F3



CM 3

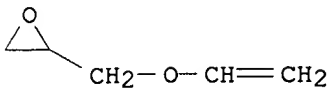
CRN 75-38-7
CMF C2 H2 F2



RN 104033-05-8 HCAPLUS
CN Oxirane, [(ethenyloxy)methyl]-, polymer with chlorotrifluoroethene and 1,1-difluoroethene (9CI) (CA INDEX NAME)

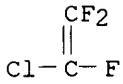
CM 1

CRN 3678-15-7
CMF C5 H8 O2



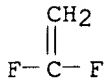
CM 2

CRN 79-38-9
CMF C2 Cl F3



CM 3

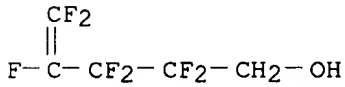
CRN 75-38-7
CMF C2 H2 F2



RN 104301-73-7 HCAPLUS
CN 4-Penten-1-ol, 2,2,3,3,4,5,5-heptafluoro-, polymer with chlorotrifluoroethene and 1,1-difluoroethene (9CI) (CA INDEX NAME)

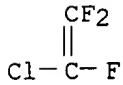
CM 1

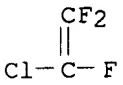
CRN 104301-72-6
CMF C5 H3 F7 O



CM 2

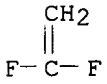
CRN 79-38-9
CMF C2 Cl F3





CM 3

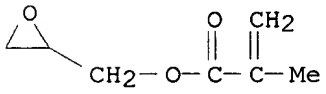
CRN 75-38-7
CMF C2 H2 F2



IT **26141-88-8**
RL: USES (Uses)
(hydroxy-contg. fluoropolymer blends, contg. polyisocyanates, coatings, room-temp.-**curable**, with high gloss)
RN 26141-88-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

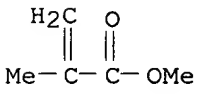
CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 80-62-6
CMF C5 H8 O2



L75 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1977:568854 HCAPLUS
DN 87:168854
TI Fluoro-anhydride **curing agents** and precursors for fluorinated **epoxy resins**
IN Griffith, James R.; O'Rear, Jacques G.
PA United States Dept. of the Navy, USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

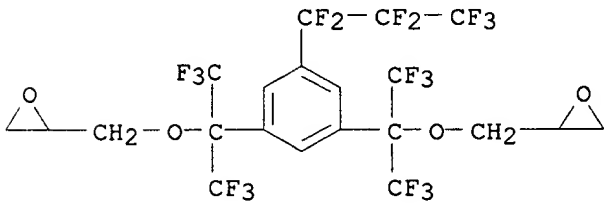
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4045408	A	19770830	US 1976-668555	19760319

AB Fluorinated arom. anhydrides were prepd. which were used **crosslinking** agents for highly fluorinated **epoxy resins** to give compns. having good strength, stability and low surface activity. Thus, o-xylene [95-47-6] was treated with hexafluoroacetone [684-16-2] in the presence of AlCl3 to give (2-hydroxyhexafluoro-2-propyl)-3,4-dimethylbenzene [2379-17-1], which was oxidized in the presence of KMnO4 at 90-100.degree. to give 4-(2-hydroxyhexafluoro-2-propyl)phthalic acid [58869-69-5], which was converted to the anhydride **crosslinking** agent, 4-(2-hydroxyhexafluoro-2-propyl)phthalic anhydride [58851-14-2] by heating 15 min at 200.degree..

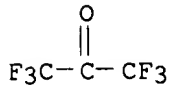
IT **64422-87-3**
RL: RCT (Reactant)
(**crosslinking** of, by (hydroxyhexafluoropropyl)phthalic anhydride)
RN 64422-87-3 HCAPLUS
CN Oxirane, 2,2'-[[5-(heptafluoropropyl)-1,3-phenylene]bis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis-, homopolymer (9CI) (CA INDEX NAME)

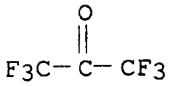
CM 1

CRN 56164-59-1
CMF C21 H13 F19 O4



IT **684-16-2**
RL: RCT (Reactant)
(**reaction** of, with polymethylbenzenes)
RN 684-16-2 HCAPLUS
CN 2-Propanone, 1,1,1,3,3,3-hexafluoro- (8CI, 9CI) (CA INDEX NAME)





L75 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1987:577659 HCAPLUS
DN 107:177659
TI Epoxy potting compositions for semiconductors
IN Sogabe, Masateru
PA Sumitomo Bakelite Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62106922	A2	19870518	JP 1985-247184	19851106

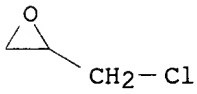
AB Moisture-resistant potting compns. contain **epoxy resins** and phenolic novolaks with .gtoreq.2 phenolic OH groups and C(CF3)C:C[CF(CF3)2]2 groups as **curing agents**. Mixing 50 parts novolak (mol. wt. 650, residual PhOH .ltoreq.0.5%) with 19 parts C3F6 trimer in DMF contg. Et3N gave a F-contg. novolak. A blend of this novolak 8.4, Epikote-828 10, and 1,8-diazabicyclo[5.4.0]undec-7-ene 0.05 part was coated on glass and **cured** to form a molding with moisture absorption 2.08% in 800 h at 85.degree. and 85% relative humidity.

IT **25068-38-6**, Epikote 828
RL: USES (Uses)
(potting compns., moisture-resistant, fluorinated novolak **crosslinkers** for)

RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

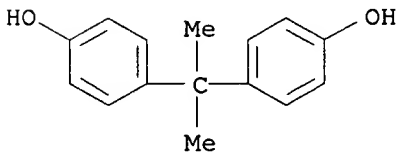
CM 1

CRN 106-89-8
CMF C3 H5 Cl O



CM 2

CRN 80-05-7
CMF C15 H16 O2



L75 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1989:516488 HCAPLUS
DN 111:116488
TI **Epoxy resin** compositions and their use as potting compositions for semiconductor devices and in the manufacture of laminates
IN Nishikawa, Akio; Koyama, Toru; Asano, Hideki; Sugawara, Toshio; Nagai, Akira; Takahashi, Akio; Katagiri, Junichi
PA Hitachi, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01011125	A2	19890113	JP 1987-166818	19870706
JP 07021048	B4	19950308		

AB Title compns. comprise polyfunctional **epoxy resins** and F-contg. cyanate resins contg. structural units I or II and III or IV and/or F-contg. cyanate resins contg. structural unit V or VI [R1, R2, R3 = F, CF3, C2F5, C3F7; X1, X3 = H, Me, CM3, C(CF3)3, OCR1:CR2R3, ZC6H4OCN, Z = direct bond, CH2, CMe2, C(CF3)2, O, S, SO2; X2, X4 = C6H3(OCN)Z]. Thus, 100 parts HP-607N (phenolic novolak) (VII) was heated with 1.0 part hexafluoropropylene trimer (F3C)FC:C[CF(CF3)2]2 and 0.2 mL Et3N at 100-120.degree. for 15 min, then treated with 3.0 parts BrCN in Me2CO-toluene at 40-60.degree. for 6 h under N to give F-contg. cyanate resin (VIII). A mixt. of EOCN-102S 100, VIII 55, Ph3P 2, KBM 303 2, Ca stearate 1, carnauba wax 1, imide-coated red P 4, powd. fused quartz glass 80, and C black 2 parts showed glass temp. 193.degree., moisture absorption 0.3%, and 0% failure in 3000-h pressure cooker test and 0% in 2000-h pressure cooker test after immersion in a soldering bath vs. 165, 2.1, 68, and 82, resp., for a control contg. VII in place of VIII.
IT **80111-79-1**, EOCN-102S
RL: USES (Uses)
(contg. fluorinated cyanate resins as **curing agents**, heat- and moisture-resistant, for potting semiconductor devices and laminate manuf.)
RN 80111-79-1 HCAPLUS
CN EOCN 102S (9CI) (CA INDEX NAME)

L100 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1990:180721 HCAPLUS
DN 112:180721
TI Method of **accelerating** the **reaction** of carboxyl group and **epoxy** group
IN Fujino, Naohiko; Yanagiura, Satoshi; Kano, Isamu; Umezaki, Mitsumasa; Nogami, Fumio
PA Mitsubishi Electric Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07C069-62
ICS C07C067-08; C08G059-02; C08G059-42
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 35
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01226853	A2	19890911	JP 1988-55234	19880308

AB The title method comprises **reaction** of epoxides and compds. having **F** on CO2H-adjacent carbon in absence of catalysts. F-contg. silane **coupling agents** are manufd. by treating fluoro lubricants having **F** on CO2H-adjacent carbon with alkoxysilyl- and **epoxy**-contg. silane **coupling agents** in absence of catalysts. **Epoxy resins** are **cured** without **catalysts** by treating with compds. having F on CO2H-adjacent carbon. Thus, 1 mol Krytox 157FS(M) and 1 mol KBE 402 were stirred at 20.degree. for 1 min to give a F-contg. silane coupling agent, which was used to treat granular .gamma.-Fe2O3 (av. size 500 .ANG.) in C2Cl3F3 showed good dispersibility in fluoro solvents.
RN 126775-71-1 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, [2-[(carboxydifluoromethoxy)difluoromethoxy]tetrafluoroethoxy]difluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 55621-22-2
CMF C7 H2 F10 O7

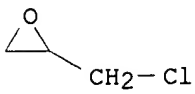
$$HO_2C-CF_2-O-CF_2-CF_2-O-CF_2-O-CF_2-CO_2H$$

CM 2

CRN 25068-38-6
CMF (C15 H16 O2 . C3 H5 Cl O)x
CCI PMS

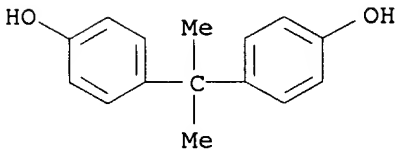
CM 3

CRN 106-89-8
CMF C3 H5 Cl O



CM 4

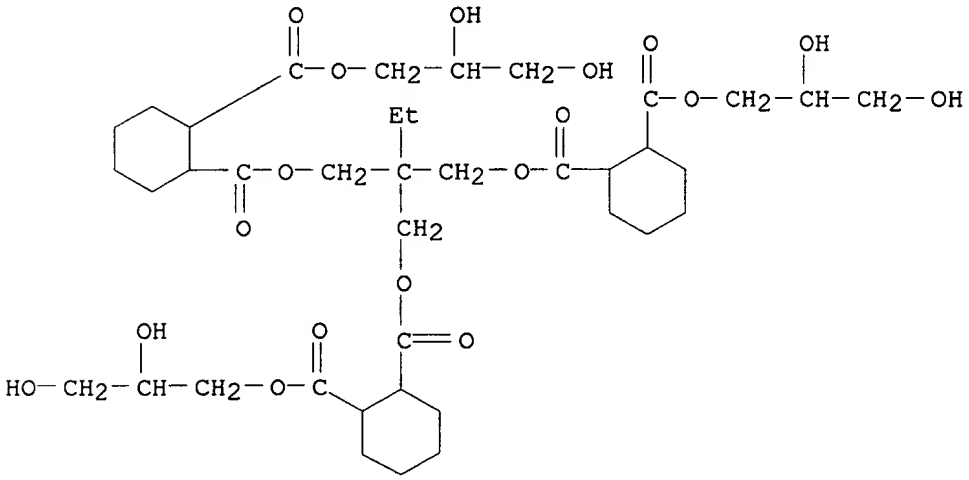
CRN 80-05-7
CMF C15 H16 O2



RN 126775-72-2 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, [2-[(carboxydifluoromethoxy)difluoromethoxy]tetrafluoroethoxy]difluoroacetate, ester with 2-[[[[2-[(2,3-dihydroxypropoxy)carbonyl]cyclohexyl]carbonyl]oxy]methyl]-2-ethyl-1,3-propanediyl bis(2,3-dihydroxypropyl 1,2-cyclohexanedicarboxylate) (9CI) (CA INDEX NAME)

CM 1

CRN 210815-66-0
CMF C39 H62 O18



CM 2

CRN 55621-22-2
CMF C7 H2 F10 O7

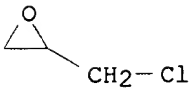
$HO_2C-CF_2-O-CF_2-CF_2-O-CF_2-O-CF_2-CO_2H$

CM 3

CRN 25068-38-6
CMF (C15 H16 O2 . C3 H5 Cl O)x
CCI PMS

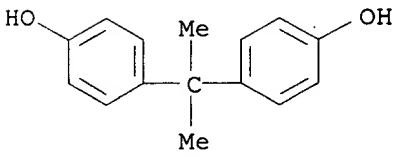
CM 4

CRN 106-89-8
CMF C3 H5 Cl O



CM 5

CRN 80-05-7
CMF C15 H16 O2



L75 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1979:475799 HCAPLUS
DN 91:75799
TI **Crosslinking** agents for aqueous **epoxy resin** emulsion coating materials
PA Hoechst A.-G., Fed. Rep. Ger.
SO Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54056700	A2	19790507	JP 1978-86210	19780717
JP 61040688	B4	19860910		
US 4197389	A	19800408	US 1978-924050	19780712
PRAI CH 1977-8853		19770718		

AB Reaction products of polyepoxides, polyalkylene glycol, and polyamine are useful as **curing agents** for aq. **epoxy resin** dispersions. Thus, a mixt. of polyethylene glycol 300, 60:40 bisphenol A diglycidyl ether-bisphenol F diglycidyl ether mixt. 470, and BF3 amine complex 2 g was heated 30 min at 80.degree. and 5 h at 170.degree.. The above product (378 g) was added to 272 g of xylylenediamine, stirred 1 h at 60.degree. and 1 h at 80.degree., and dild. with H2O to 80% solids. The above soln. (813 g) was treated with 74 g acrylonitrile to give a **curing agent**. An 88:12 mixt. of bisphenol A-epichlorohydrin copolymer [**25068-38-6**] and 2-ethylhexyl glycidyl ether 66, polyethylene glycol abietate 2.67, polyethylene glycol nonylphenyl ether 2, 1-dodecaonl 1.33, and the above **curing agent** 59 parts were dispersed in H2O to give a 60% solids emulsion having pot life 35 min. The dispersion was applied to an asbestos cement board to form a 200-.mu. coating having initial drying time 4 h 30 min, complete **curing** time 24 h, and Erichsen test penetration 10 mm.

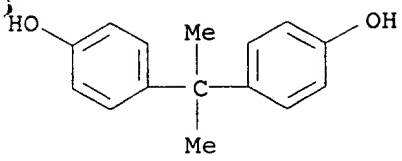
IT **25068-38-6**
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, emulsion, **curing agents** for)
RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

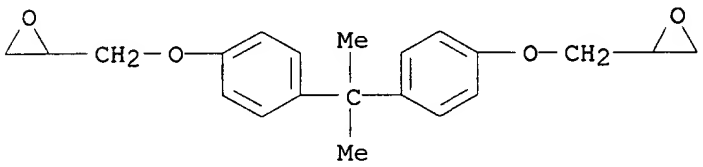
CRN 106-89-8
CMF C3 H5 Cl O

CM 2

CRN 80-05-7
CMF C15 H16 O2



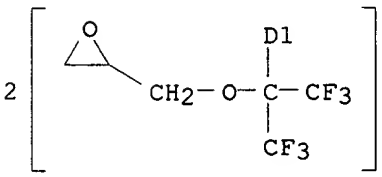
IT **1675-54-3D, reaction** products with polyethylene glycol, bisphenol **F** diglycidyl ether, xylylenediamine, and acrylonitrile
RL: USES (Uses)
(**curing agents,** for **epoxy resin** emulsion coatings)
RN 1675-54-3 HCAPLUS
CN Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis- (9CI) (CA INDEX NAME)



L75 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1992:107716 HCAPLUS
DN 116:107716
TI Development and study of hydrophilic epoxy based adhesives
AU Tod, D. A.; Shaw, S. J.
CS RARDE, Waltham Abbey/Essex, EN9 1AX, UK
SO Adhesion (London) (1991), 15, 196-212
CODEN: ADHED5; ISSN: 0260-4450
DT Journal
LA English
AB As the F content increases, the hydrophobicity and toughness of fluoroepoxy resin increase, but its modulus decreases. The silicone amine-**cured** fluoroepoxy resin has greater hydrophobicity and toughness but lower glass transition temp. (Tg) and modulus than the fluoroanhydride-**cured** fluoroepoxy resin due to the greater flexibility of silicone amine. The **crosslinking** accelerator affects mech. properties and the moisture absorption of the fluoroepoxy resin **cured**. The actual depression in Tg due to the moisture absorption is lower than that normally predicted.
IT **109355-35-3P 109355-37-5P 109355-39-7P**
121264-44-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and mech. properties and moisture absorption of **cured**
)
RN 109355-35-3 HCAPLUS
CN 1-Propanamine, 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis-, polymer with 2,2'-[[(tridecafluorohexyl)phenylene]bis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 109355-34-2
CMF C24 H13 F25 O4
CCI IDS
CDES 8:ID,RING(C6)

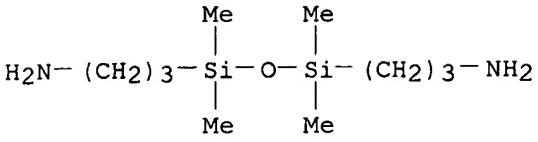


D1-$(CF_2)_5$-CF_3

CM 2

CRN 2469-55-8

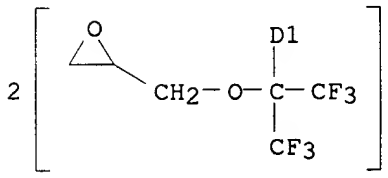
CMF C10 H28 N2 O Si2



RN 109355-37-5 HCAPLUS
CN 1-Propanamine, 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis-, polymer with 2,2'-[[(heptadecafluorooctyl)phenylene]bis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

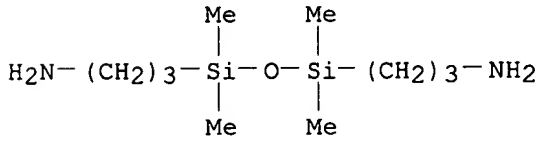
CRN 109355-36-4
CMF C26 H13 F29 O4
CCI IDS
CDES 8:ID,RING(C6)



D1-$(CF_2)_7$-CF_3

CM 2

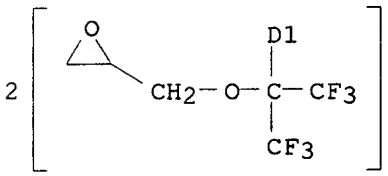
CRN 2469-55-8
CMF C10 H28 N2 O Si2



RN 109355-39-7 HCAPLUS
CN 1,3-Isobenzofurandione, 5-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]-, polymer with 2,2'-[[(heptadecafluorooctyl)phenylene]bis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

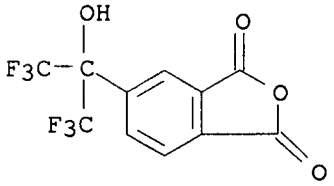
CRN 109355-36-4
CMF C26 H13 F29 O4
CCI IDS
CDES 8:ID,RING(C6)



D1-$(CF_2)_7$-CF_3

CM 2

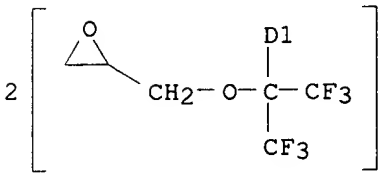
CRN 58851-14-2
CMF C11 H4 F6 O4



RN 121264-44-6 HCAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 2,2'-[[(heptadecafluorooctyl)phenylene]bis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxymethylene]]bis[oxirane] and 5-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]-1,3-isobenzofurandione (9CI) (CA INDEX NAME)

CM 1

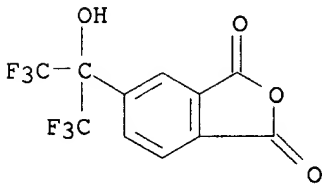
CRN 109355-36-4
CMF C26 H13 F29 O4
CCI IDS
CDES 8:ID,RING(C6)



D1-$(CF_2)_7$-CF_3

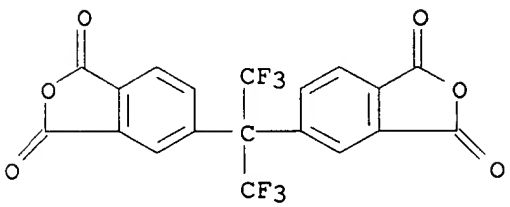
CM 2

CRN 58851-14-2
CMF C11 H4 F6 O4



CM 3

CRN 1107-00-2
CMF C19 H6 F6 O6



L108 ANSWER 8 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1996:684775 HCAPLUS
DN 125:303432
TI **Curable** fluoropolymer coating compositions with improved compatibility to pigments
IN Ishida, Tooru; Kodama, Shunichi
PA Asahi Glass Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C09D127-12
ICS C09D127-12
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08231920	A2	19960910	JP 1995-40987	19950228

PI JP 08231920 A2 19960910 JP 1995-40987 19950228

AB Coating compns. showing good storage stability, acid resistance, gloss, and water repellency contain (A) **curable** group-substituted fluoropolymers having N-contg. functional groups on the terminals, (B) **hardeners** reactive to the **curable** groups, and optionally (C) polyesters, acrylic resins, polyurethanes, fluoropolymers, phenolic resins, **epoxy resins**, and/or acrylic siloxanes. Thus, 100 parts compn. prepd. from 92 parts 60% nonvolatiles xylene soln. of 251:253:58 tetrafluoroethylene-cyclohexyl vinyl ether-4-hydroxybutyl vinyl ether copolymer [I, prepd. by using 2,2-azobis-2-(2-imidazolin-2-yl)propane], 36 parts BuOAc, and 200 parts Tipaque CR 93 (TiO2), 100 parts compn. prepd. from 92 parts I soln., 36 parts BuOAc, and 200 parts Daipyroxide Black 9510 (Cu-Cr-based pigment), 406 parts I soln., and 52 parts Coronate 2507 (polyisocyanate) were mixed to give a gray compn., cast on an Al plate, left at room temp. for 30 min, kneaded on the surface by brush, and dried at room temp. for 1 day to give a coating showing no color (pigment) sepn. and no color streak.

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**curable** fluoropolymers terminated by nitrogen-contg. **functional** groups for **coatings** with improved compatibility to pigments)

RN 183174-78-9 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with Coronate 2507, (ethenyloxy)cyclohexane and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

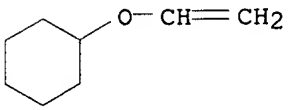
CM 2

CRN 17832-28-9
CMF C6 H12 O2

$H_2C{=}CH{-}O{-}(CH_2)_4{-}OH$

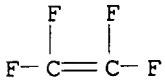
CM 3

CRN 2182-55-0
CMF C8 H14 O



CM 4

CRN 116-14-3
CMF C2 F4



RN 183174-80-3 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with chlorotrifluoroethene, coronate 2507, (ethenyloxy)cyclohexane and ethoxyethene (9CI) (CA INDEX NAME)

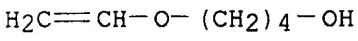
CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

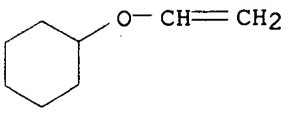
CM 2

CRN 17832-28-9
CMF C6 H12 O2



CM 3

CRN 2182-55-0
CMF C8 H14 O

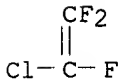


CM 4

CRN 109-92-2
CMF C4 H8 O

CM 5

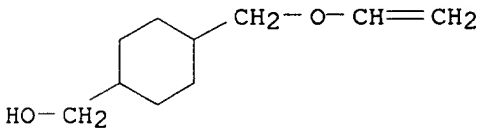
CRN 79-38-9
CMF C2 Cl F3



RN 183174-82-5 HCAPLUS
CN Cyclohexanemethanol, 4-[(ethenyloxy)methyl]-, polymer with Coronate 2507, (ethenyloxy)cyclohexane, ethoxyethene and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 114651-37-5
CMF C10 H18 O2



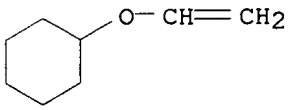
CM 2

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

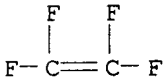
CM 3

CRN 2182-55-0
CMF C8 H14 O



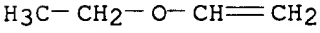
CM 4

CRN 116-14-3
CMF C2 F4



CM 5

CRN 109-92-2
CMF C4 H8 O



RN 183174-84-7 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with chlorotrifluoroethene, Coronate 2507 and 2-methoxy-1-propene (9CI) (CA INDEX NAME)

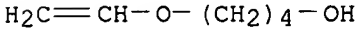
CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

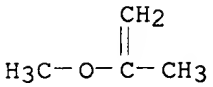
CM 2

CRN 17832-28-9
CMF C6 H12 O2



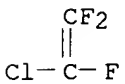
CM 3

CRN 116-11-0
CMF C4 H8 O



CM 4

CRN 79-38-9
CMF C2 Cl F3



RN 183174-86-9 HCAPLUS
CN Neononanoic acid, ethenyl ester, polymer with chlorotrifluoroethene, Coronate 2507, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane and ethoxyethene (9CI) (CA INDEX NAME)

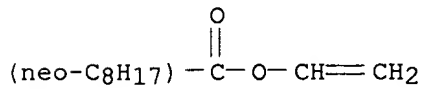
CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

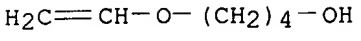
CRN 54423-67-5
CMF C11 H20 O2
CCI IDS
CDES 8:ID,NEO



CM 3

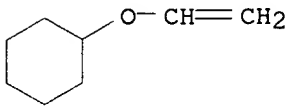
CRN 17832-28-9

CMF C6 H12 O2



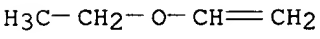
CM 4

CRN 2182-55-0
CMF C8 H14 O



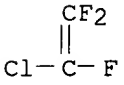
CM 5

CRN 109-92-2
CMF C4 H8 O



CM 6

CRN 79-38-9
CMF C2 Cl F3



RN 183174-88-1 HCAPLUS
CN Propanoic acid, 2,2-dimethyl-, ethenyl ester, polymer with Coronate 2507, ethoxyethene, 2-(2-propenyloxy)ethanol and tetrafluoroethene (9CI) (CA INDEX NAME)

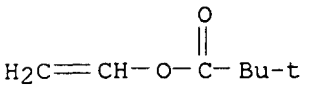
CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

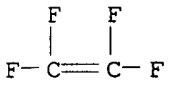
CM 2

CRN 3377-92-2
CMF C7 H12 O2



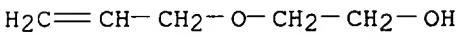
CM 3

CRN 116-14-3
CMF C2 F4



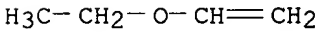
CM 4

CRN 111-45-5
CMF C5 H10 O2



CM 5

CRN 109-92-2
CMF C4 H8 O



RN 183174-90-5 HCAPLUS
CN Neononanoic acid, ethenyl ester, polymer with chlorotrifluoroethene, Coronate 2507, 1,1,2,3,3,3-hexafluoro-1-propene, 2-hydroxyethyl 2-butenoate and [(2-propenyloxy)methyl]oxirane (9CI) (CA INDEX NAME)

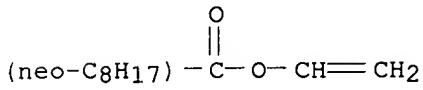
CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

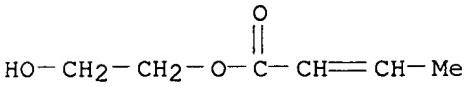
CM 2

CRN 54423-67-5
CMF C11 H20 O2
CCI IDS
CDES 8:ID,NEO



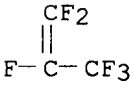
CM 3

CRN 21734-63-4
CMF C6 H10 O3



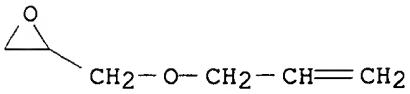
CM 4

CRN 116-15-4
CMF C3 F6



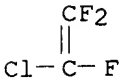
CM 5

CRN 106-92-3
CMF C6 H10 O2



CM 6

CRN 79-38-9
CMF C2 Cl F3



RN 183174-91-6 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with chlorotrifluoroethene, Coronate 2507, (ethenyloxy)cyclohexane, 1-(ethenyloxy)-1,1,2,2,3,3,3-heptafluoropropane and ethoxyethene (9CI) (CA INDEX NAME)

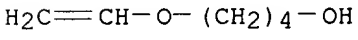
CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

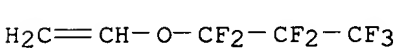
CM 2

CRN 17832-28-9
CMF C6 H12 O2



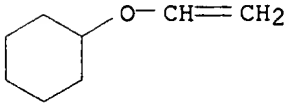
CM 3

CRN 6996-01-6
CMF C5 H3 F7 O



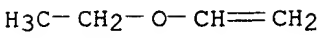
CM 4

CRN 2182-55-0
CMF C8 H14 O



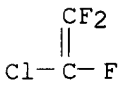
CM 5

CRN 109-92-2
CMF C4 H8 O



CM 6

CRN 79-38-9
CMF C2 Cl F3



RN 183174-92-7 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with Coronate 2507, (ethenyloxy)cyclohexane, ethoxyethene and tetrafluoroethene (9CI) (CA INDEX NAME)

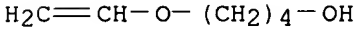
CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

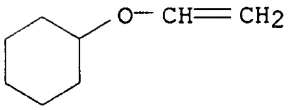
CM 2

CRN 17832-28-9
CMF C6 H12 O2



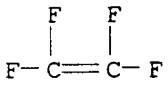
CM 3

CRN 2182-55-0
CMF C8 H14 O



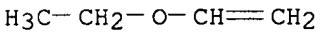
CM 4

CRN 116-14-3
CMF C2 F4



CM 5

CRN 109-92-2
CMF C4 H8 O



RN 183174-93-8 HCAPLUS
CN 2-Butenoic acid, 2-hydroxyethyl ester, polymer with chlorotrifluoroethene, Coronate 2507, (ethenyloxy)cyclohexane and 2-methoxy-1-propene (9CI) (CA INDEX NAME)

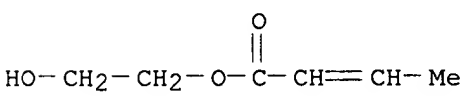
CM 1

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

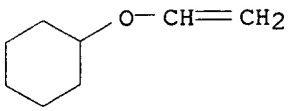
CM 2

CRN 21734-63-4
CMF C6 H10 O3



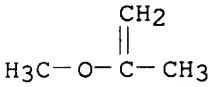
CM 3

CRN 2182-55-0
CMF C8 H14 O



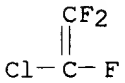
CM 4

CRN 116-11-0
CMF C4 H8 O



CM 5

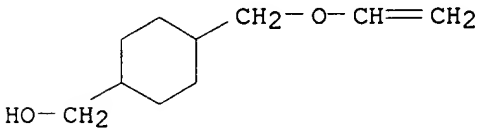
CRN 79-38-9
CMF C2 Cl F3



RN 183174-94-9 HCAPLUS
CN 2-Butenoic acid, 2-hydroxyethyl ester, polymer with Coronate 2507, 4-[(ethenyloxy)methyl]cyclohexanemethanol, ethoxyethene and 1,1,2,3,3,3-hexafluoro-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 114651-37-5
CMF C10 H18 O2



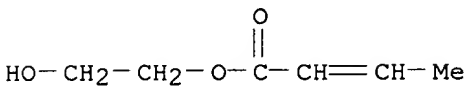
CM 2

CRN 109190-12-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

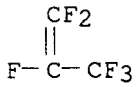
CM 3

CRN 21734-63-4
CMF C6 H10 O3



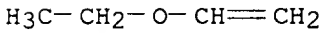
CM 4

CRN 116-15-4
CMF C3 F6

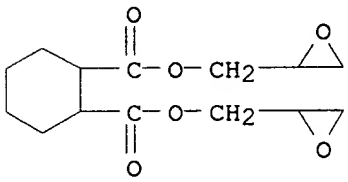


CM 5

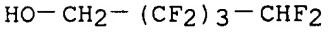
CRN 109-92-2
CMF C4 H8 O



L75 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2002 ACS
AN 1994:108298 HCAPLUS
DN 120:108298
TI Surface properties of fluoroalkylated oligomers with carbon-carbon bond formation
AU Sawada, Hideo; Komoto, Keiji; Sano, Masahiro; Ishidoya, Masahiro; Ogawa, Hisao
CS Dep. Chem., Nara Natl. Coll. Technol., Yamatokoriyama, 639-11, Japan
SO Kobunshi Ronbunshu (1993), 50(12), 983-6
CODEN: KBRBA3; ISSN: 0386-2186
DT Journal
LA Japanese
AB Fluoroalkylated oligomers with carbon-carbon bond formation were prepd. by reactions of fluoroalkanoyl peroxides with acrylic acid and ethylene oxide unit-contg. methacrylates. These fluorinated oligomers were sol. in hydrocarbon oligomer solns. The **fluorinated** oligomers **reacted** with the usual **epoxy** and melamine **curing agents** to afford the **curing** films. These films exhibited surface properties typical of the amphiphiles.
IT **5493-45-8D**, polymers, fluoroalkylated derivs.
RL: PRP (Properties)
(films, contact angle of water or dodecane on)
RN 5493-45-8 HCAPLUS
CN 1,2-Cyclohexanedicarboxylic acid, bis(oxiranylmethyl) ester (9CI) (CA INDEX NAME)



108 ANSWER 16 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1993:451361 HCAPLUS
DN 119:51361
TI Ultraviolet **cure** of epoxyfluorosilicones and related systems
AU Eckberg, Richard P.; Evans, E. Robert
CS Res. Dev. Dep., GE Silicones, Waterford, NY, 12188, USA
SO RadTech '92 North Am. UV/EB Conf. Expo., Conf. Proc. (1992), Volume 1, 541-52 Publisher: RadTech Int. North Am., Northbrook, Ill.
CODEN: 58SXA8
DT Conference
LA English
CC 42-3 (Coatings, Inks, and Related Products)
AB Fluorinated silicone polymers are prepd. and functionalized with either 4-vinylcyclohexene monoxide or allyl glycidyl ether and then **cured** photochem. with (4-octyloxyphenyl)(phenyl)iodonium hexafluoroantimonate and isopropylthioxanthone. The resulting **cured** coatings resist attack by hydrocarbons and may be useful as fuel-resistant coatings.
T Siloxanes and Silicones, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**epoxy**, **fluorine**-contg., coatings, hydrocarbon-resistant, UV **curing** of)
IT Fluoropolymers
RL: TEM (Technical or engineered material use); USES (Uses)
(**epoxy**-siloxanes, coatings, hydrocarbon-resistant, UV **curing** of)
IT **Crosslinking** catalysts
(photochem., for fluorinated siloxane hydrocarbon-resistant coatings)
IT **Crosslinking**
(photochem., of **epoxy resin**-fluoropolymer-siloxane hydrocarbon-resistant coatings)
IT **Epoxy resins**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(siloxane-, **fluorine**-contg., coatings, hydrocarbon-resistant, UV **curing** of)
IT **355-80-6**, 1H,1H,5H-Octafluoro-1-pentanol
RL: USES (Uses)
(UV **curing** of **fluorinated epoxy** siloxane hydrocarbon-resistant **coatings** in presence of)
T **355-80-6**, 1H,1H,5H-Octafluoro-1-pentanol
RL: USES (Uses)
(UV **curing** of **fluorinated epoxy** siloxane hydrocarbon-resistant **coatings** in presence of)
RN 355-80-6 HCAPLUS
CN 1-Pentanol, 2,2,3,3,4,4,5,5-octafluoro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

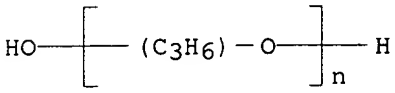


108 ANSWER 20 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1990:425058 HCAPLUS
DN 113:25058
TI **Curable** liquid graft fluoropolymer-polyoxyalkylenes for sealants and coatings
IN Miura, Ryuichi; Moriwaki, Ken; Takeyasu, Hiromitu; Washita, Hiroshi; Miyazaki, Nobuyuki
PA Asahi Glass Co., Ltd., Japan
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C08F008-00
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 42
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 343527	A2	19891129	EP 1989-109039	19890519
	EP 343527	A3	19911227		
	EP 343527	B1	19950125		
	R: DE, FR, GB, IT				
	JP 01297410	A2	19891130	JP 1988-124908	19880524
	JP 2725280	B2	19980311		
	JP 02245005	A2	19900928	JP 1989-63910	19890317
	JP 2757436	B2	19980525		
	AU 8934922	A1	19891130	AU 1989-34922	19890518
	AU 607072	B2	19910221		
	US 5073613	A	19911217	US 1989-354197	19890519
	CA 1338794	A1	19961210	CA 1989-600400	19890523
	US 5096989	A	19920317	US 1990-556374	19900723
	US 5155173	A	19921013	US 1991-767688	19910930
	JP 09309927	A2	19971202	JP 1997-32406	19970217
	JP 3220655	B2	20011022		
	JP 10306129	A2	19981117	JP 1997-315502	19971117
	JP 2981195	B2	19991122		
PRAI	JP 1988-124908	A	19880524		
	JP 1989-63910	A	19890317		
	US 1989-354197	A3	19890519		
	US 1990-556374	A3	19900723		

AB The title polymers have 20-70 mol% repeating units derived from fluoroolefins and 1-80 mol% repeating units contg. polyoxyalkylene chains terminated with active H, epoxy, or moisture-**curable** functional groups. Chlorotrifluoroethylene 71, Et vinyl ether 38, and propoxylated hydroxybutyl vinyl ether 60 g were soln. polymd. with AIBN at 65.degree. to give a polymer with OH no. 28.4 mg KOH/g, no.-av. mol. wt. 6000, glass temp. -20.degree., and 25.degree. viscosity 15,000 cP. The above product was **cured** with Duranate D101 (1:1 OH:NCO), giving a product with elongation 600%, breaking strength 7 kg/cm2, modulus (50%) 3 kg/cm2, and elongation retention after 1000 h UV exposure 80%.
127739-66-6P 127739-67-7P **127739-68-8DP, functional** derivs. 127739-68-8P
RL: PREP (Preparation)
(prepn. of liq., **curable**)
IT **127907-13-5P 127907-14-6P 127965-05-3P**
RL: PREP (Preparation)
(prepn. of, for **coatings** and sealants)
IT **25322-69-4DP**, reaction products with diisocyanatodimethylsilane, graft polymer with chlorotrifluoroethylene and vinyl monomers **127739-68-8DP, functional** derivs.
RL: PREP (Preparation)
(prepn. of liq., **curable**)

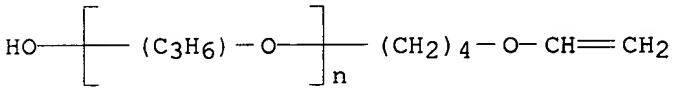
RN 25322-69-4 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 127739-68-8 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[4-(ethenyloxy)butyl]-.omega.-hydroxy-, polymer with chlorotrifluoroethene, 1,6-diisocyanatohexane and ethoxyethene (9CI) (CA INDEX NAME)

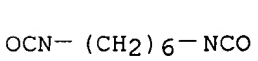
CM 1

CRN 127739-64-4
CMF (C3 H6 O)n C6 H12 O2
CCI IDS, PMS
CDES 8:ID



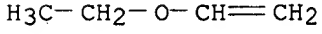
CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



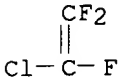
CM 3

CRN 109-92-2
CMF C4 H8 O



CM 4

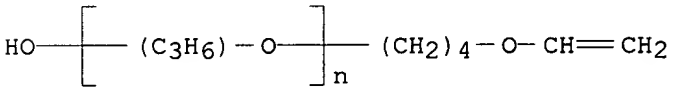
CRN 79-38-9
CMF C2 Cl F3



IT **127907-13-5P 127907-14-6P 127965-05-3P**
RL: PREP (Preparation)
(prepn. of, for **coatings** and sealants)
RN 127907-13-5 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[4-(ethenyloxy)butyl]-.omega.-hydroxy-, polymer with chlorotrifluoroethene, Duranate D 101 and (ethenyloxy)cyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 127739-64-4
CMF (C3 H6 O)n C6 H12 O2
CCI IDS, PMS
CDES 8:ID



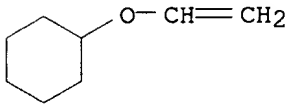
CM 2

CRN 127670-13-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

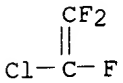
CM 3

CRN 2182-55-0
CMF C8 H14 O



CM 4

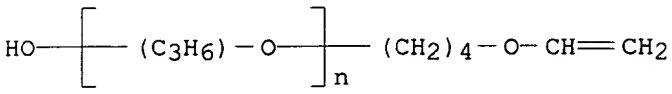
CRN 79-38-9
CMF C2 Cl F3



RN 127907-14-6 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[4-(ethenyloxy)butyl]-.omega.-hydroxy-, polymer with Duranate D 101, ethoxyethene and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 127739-64-4
CMF (C3 H6 O)n C6 H12 O2
CCI IDS, PMS
CDES 8:ID



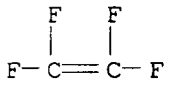
CM 2

CRN 127670-13-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

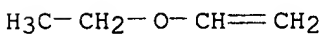
CM 3

CRN 116-14-3
CMF C2 F4



CM 4

CRN 109-92-2
CMF C4 H8 O

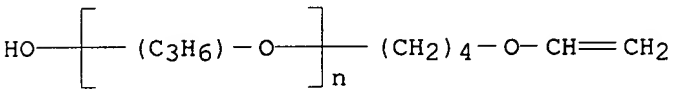


RN 127965-05-3 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[4-(ethenyloxy)butyl]-.omega.-hydroxy-, polymer with chlorotrifluoroethene, Duranate D 101 and ethoxyethene (9CI) (CA INDEX NAME)

CM 1

CRN 127739-64-4
CMF (C3 H6 O)n C6 H12 O2
CCI IDS, PMS
CDES 8:ID



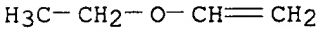
CM 2

CRN 127670-13-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

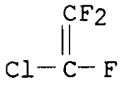
CM 3

CRN 109-92-2
CMF C4 H8 O



CM 4

CRN 79-38-9
CMF C2 Cl F3



L100 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1992:85019 HCAPLUS
DN 116:85019
TI Coupling agent-treated fillers for plastics
IN Tezuka, Kazuhiko; Kitao, Koichi
PA Nippon Kokan K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C03C025-02
ICS C08K009-04
CC 37-6 (Plastics Manufacture and Processing)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03228853	A2	19911009	JP 1990-23964	19900202

AB The title fillers treated with compns. contg. **functional fluoro** compds. capable of **reacting** with glass fillers and/or the plastic matrix give hot water- and chem. resistant composites. Thus, glass beads (diam. 10-50 .mu.m) were dipped 10 s in a liq. contg. 0.5% .gamma.-aminopropyltrimethoxysilane and 1.0% N-[3-(trimethoxysilyl)propyl]perfluoroheptylcarbonamide (I), filtered, dried, mixed with Epikote 828-HY 932 mixt., and **cured** to give a 3-mm board with filler content 40% showing flexural strength retention 99, 98, 99, and 97%, after being dipped 1 and 7 days in water at 95.degree. and 1 and 7 days in aq. NaOH (pH 12), resp., vs. 96, 78, 92, and 71, resp., without I.

IT **Epoxy resins**, uses
RL: USES (Uses)
(contg. fluoro compd.-silane mixt.-treated fillers, with good mech. strength retention)

IT **Coupling agents**
(fluoro compd.-silane mixts., fillers treated with, for plastics)

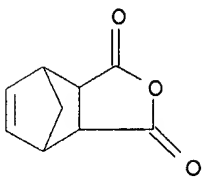
IT Perfluoro compounds
RL: USES (Uses)
(silane mixts., **coupling agents**, fillers treated with, for plastics)

IT 116-15-4, Hexafluoropropene 428-59-1, Hexafluoropropene oxide 98046-76-5 127175-49-9
RL: USES (Uses)
(silane mixts., **coupling agents**, fillers treated with, for plastics)

RN 107445-41-0 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and rel-(3aR,4S,7R,7aS)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME)

CM 1

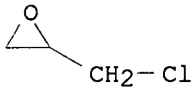
CRN 25134-21-8
CMF C10 H10 O3
CCI IDS
CDES *



D1--Me

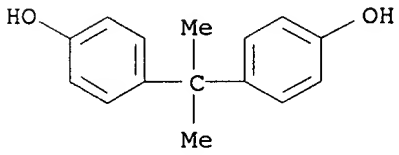
CM 2

CRN 106-89-8
CMF C3 H5 Cl O



CM 3

CRN 80-05-7
CMF C15 H16 O2



RN 138898-02-9 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with Araldite HY 932 and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

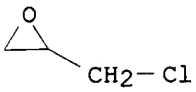
CM 1

CRN 111019-33-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

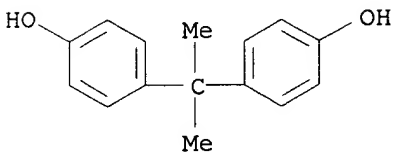
CM 2

CRN 106-89-8
CMF C3 H5 Cl O



CM 3

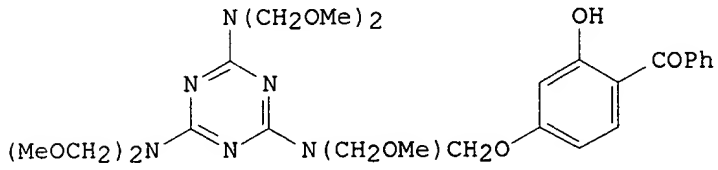
CRN 80-05-7
CMF C15 H16 O2



L108 ANSWER 21 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1990:200807 HCAPLUS
DN 112:200807
TI **Curable** fluoropolymer compositions
IN Takayanagi, Takashi; Miyazaki, Nobuyuki; Sasao, Yasuyuki
PA Asahi Glass Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L027-12
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 37
FAN.CNT 1

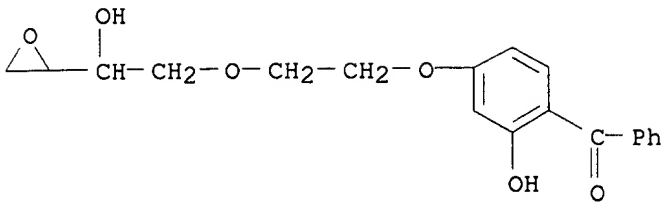
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01287160	A2	19891117	JP 1988-114863	19880513
JP 07119346	B4	19951220		

GI



I

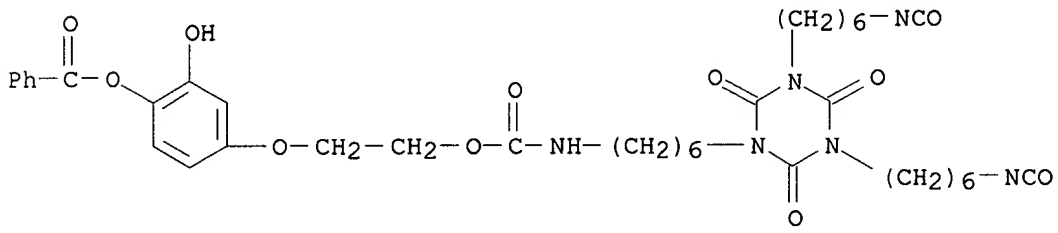
AB The title compns. with excellent high-temp. UV absorptivity, useful for coatings, comprise solvent-sol. **curable fluoro** copolymers and **reaction** products of UV absorbers and fluoropolymer **curing** agents. Thus, 202 g Biosorb V 100 (2,4-dihydroxybenzophenone) was treated with 294 g hexa(methoxymethylol)melamine (I) in xylene in the presence of p-MeC6H4SO3H at 120.degree. for 1 h to give a mixt. contg. I and an adduct II. Then, 62:12:16 C2F4-allyl alc.-vinyl propionate copolymer (III) 100, I-II mixt. 50, I 2, p-MeC6H4SO3H 0.5, xylene 150, and MEK 100 parts were blended, applied on a glass plate, and **cured** 40 min at 130.degree. to give a test piece showing UV absorption 97, 96, and 96%, initially, after 14 days at 140.degree., and after 3000-h exposure to a Sunshine weather-o-meter, vs., 96, 20, and 70, resp., for a test piece contg. III, 2-hydroxy-4-octoxybenzophenone, and hexamethylene diisocyanate cyclic trimer.
ST fluoropolymer blend reactive UV absorber; hardener blend fluoropolymer coating; heat resistance UV absorptivity coating; light resistance UV absorptivity coating
IT **126958-99-4P**, 2-Hydroxy-4-(6,7-epoxy-5-hydroxy-3-oxaheptoxy)benzophenone
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with fluoropolymer hardeners)
RN 126958-99-4 HCAPLUS
CN Methanone, [2-hydroxy-4-[2-(2-hydroxy-2-oxiranylethoxy)ethoxy]phenyl]phenyl- (9CI) (CA INDEX NAME)



IT **126895-36-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, **coating**, with lasting UV absorptivity)
RN 126895-36-1 HCAPLUS
CN Carbamic acid, [6-[tetrahydro-3,5-bis(6-isocyanatohexyl)-2,4,6-trioxo-1,3,5-triazin-1(2H)-yl]hexyl]-, 2-[4-(benzoyloxy)-3-hydroxyphenoxy]ethyl ester, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane, ethoxyethene and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

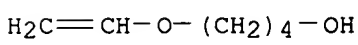
CM 1

CRN 126895-35-0
CMF C39 H50 N6 O11



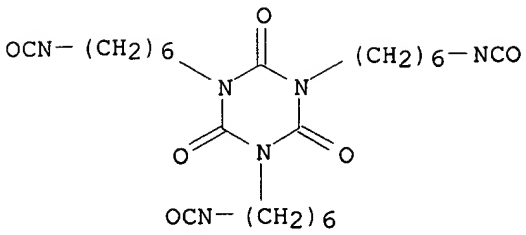
CM 2

CRN 17832-28-9
CMF C6 H12 O2



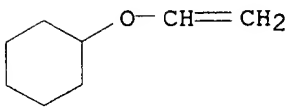
CM 3

CRN 3779-63-3
CMF C24 H36 N6 O6



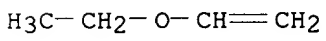
CM 4

CRN 2182-55-0
CMF C8 H14 O



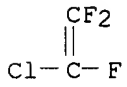
CM 5

CRN 109-92-2
CMF C4 H8 O



CM 6

CRN 79-38-9
CMF C2 Cl F3

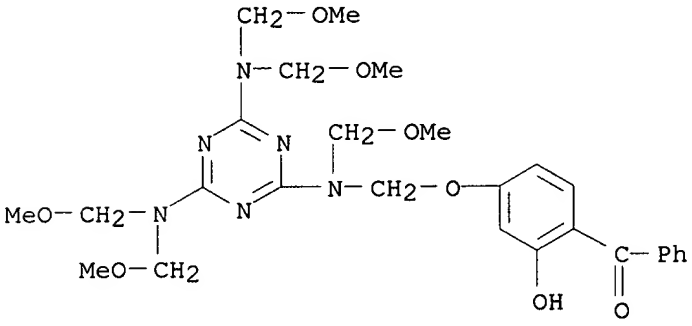


IT **126895-38-3P 126895-44-1P 126895-45-2P**
126895-47-4P 126895-49-6P 126913-59-5P
126940-63-4P 126940-64-5P 126976-98-5P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of, **coating**, with lasting UV absorptivity)
RN 126895-38-3 HCAPLUS
CN Propanoic acid, ethenyl ester, polymer with [4-[[[4,6-bis[bis(methoxymethyl)amino]-1,3,5-triazin-2-yl](methoxymethyl)amino]metho

xy]-2-hydroxyphenyl]phenylmethanone, N,N,N',N',N'',N''-hexakis(methoxymethyl)-1,3,5-triazine-2,4,6-triamine, 2-propen-1-ol and tetrafluoroethene (9CI) (CA INDEX NAME)

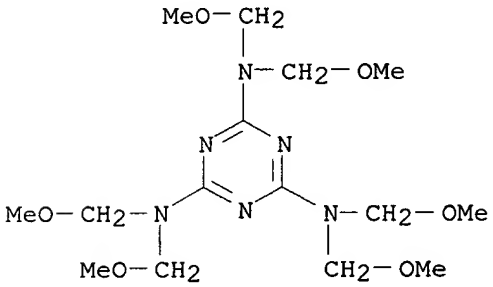
CM 1

CRN 29075-04-5
CMF C27 H36 N6 O8



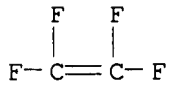
CM 2

CRN 3089-11-0
CMF C15 H30 N6 O6



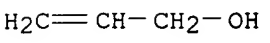
CM 3

CRN 116-14-3
CMF C2 F4



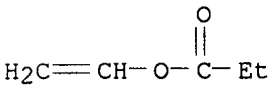
CM 4

CRN 107-18-6
CMF C3 H6 O



CM 5

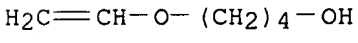
CRN 105-38-4
CMF C5 H8 O2



RN 126895-44-1 HCAPLUS
CN Butanedioic acid, mono[2-(4-benzoyl-3-hydroxyphenoxy)ethyl] ester, polymer with chlorotrifluoroethene, dihydro-2,5-furandione, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane, ethoxyethene and N,N,N',N',N'',N''-hexakis(methoxymethyl)-1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

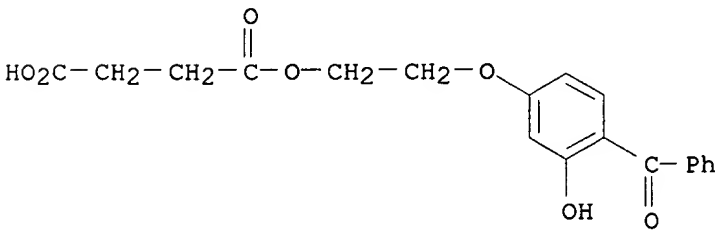
CM 1

CRN 17832-28-9
CMF C6 H12 O2



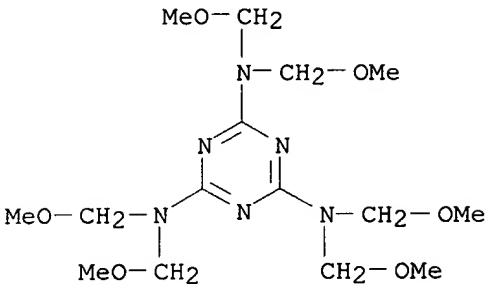
CM 2

CRN 14814-20-1
CMF C19 H18 O7



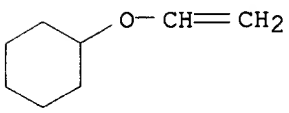
CM 3

CRN 3089-11-0
CMF C15 H30 N6 O6



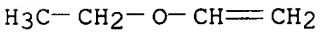
CM 4

CRN 2182-55-0
CMF C8 H14 O



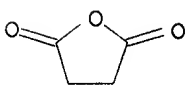
CM 5

CRN 109-92-2
CMF C4 H8 O



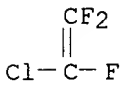
CM 6

CRN 108-30-5
CMF C4 H4 O3



CM 7

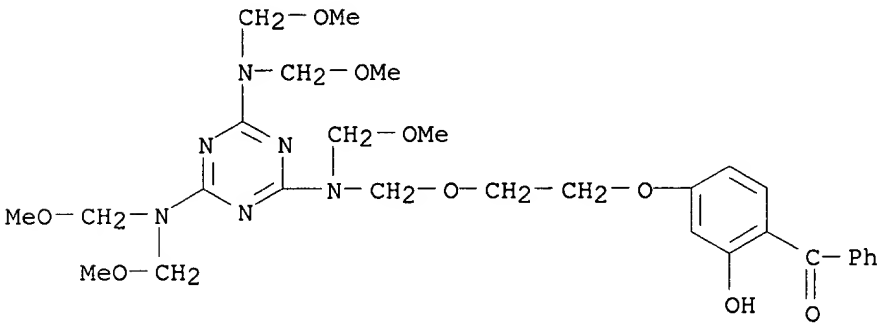
CRN 79-38-9
CMF C2 Cl F3



RN 126895-45-2 HCAPLUS
CN Methanone, [4-[2-[[[4,6-bis[bis(methoxymethyl)amino]-1,3,5-triazin-2-yl](methoxymethyl)amino]methoxy]ethoxy]-2-hydroxyphenyl]phenyl-, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane, ethoxyethene and N,N,N',N',N'',N''-hexakis(methoxymethyl)-1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

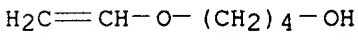
CM 1

CRN 88575-96-6
CMF C29 H40 N6 O9



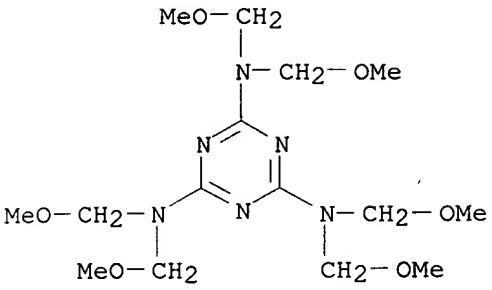
CM 2

CRN 17832-28-9
CMF C6 H12 O2



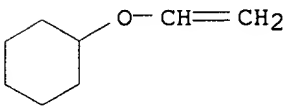
CM 3

CRN 3089-11-0
CMF C15 H30 N6 O6



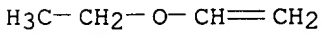
CM 4

CRN 2182-55-0
CMF C8 H14 O



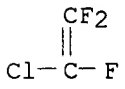
CM 5

CRN 109-92-2
CMF C4 H8 O



CM 6

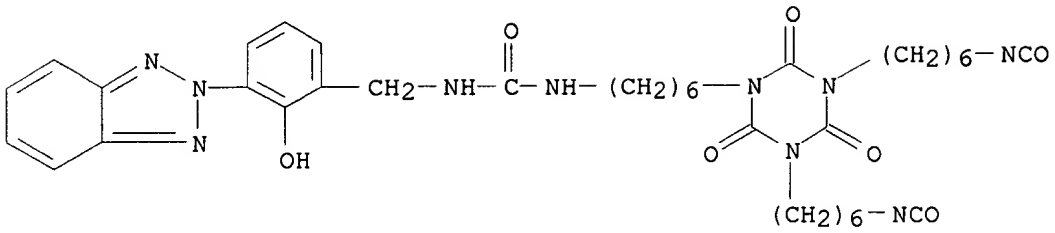
CRN 79-38-9
CMF C2 Cl F3



RN 126895-47-4 HCAPLUS
CN Urea, N-[[3-(2H-benzotriazol-2-yl)-2-hydroxyphenyl]methyl]-N'-[6-[tetrahydro-3,5-bis(6-isocyanatohexyl)-2,4,6-trioxo-1,3,5-triazin-1(2H)-yl]hexyl]-, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane, ethoxyethene and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

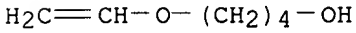
CM 1

CRN 126895-46-3
CMF C37 H48 N10 O7



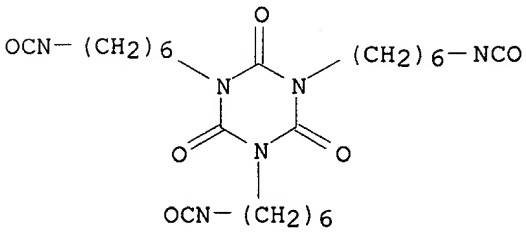
CM 2

CRN 17832-28-9
CMF C6 H12 O2



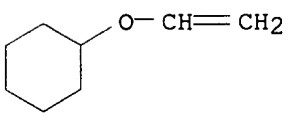
CM 3

CRN 3779-63-3
CMF C24 H36 N6 O6



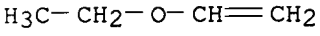
CM 4

CRN 2182-55-0
CMF C8 H14 O



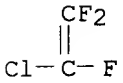
CM 5

CRN 109-92-2
CMF C4 H8 O



CM 6

CRN 79-38-9
CMF C2 Cl F3



RN 126895-49-6 HCAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(6-isocyanatohexyl)-, polymer with .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-[[[[6-[tetrahydro-3,5-bis(6-isocyanatohexyl)-2,4,6-trioxo-1,3,5-triazin-1(2H)-yl]hexyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl), chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane and ethoxyethene (9CI) (CA INDEX NAME)

CM 1

CRN 126895-48-5
CMF (C2 H4 O)n C43 H57 N9 O9
CCI PMS

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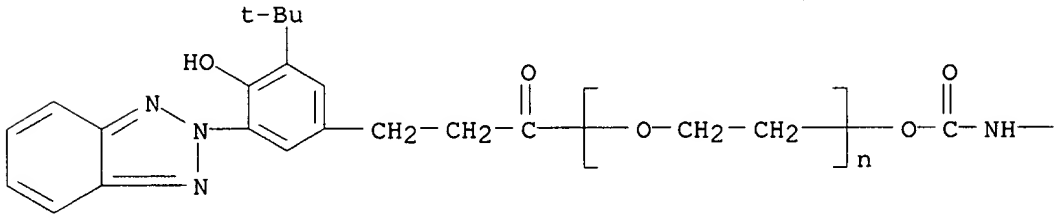
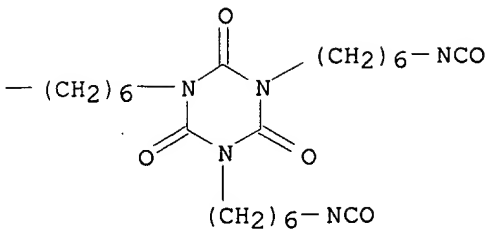
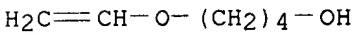




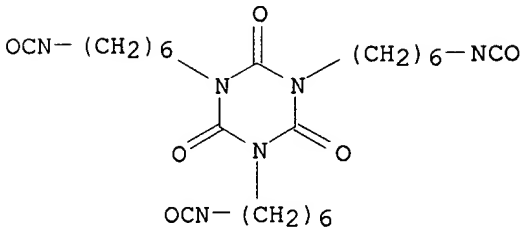
CM 2

CRN 17832-28-9
CMF C6 H12 O2



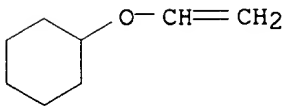
CM 3

CRN 3779-63-3
CMF C24 H36 N6 O6



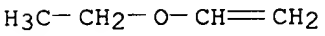
CM 4

CRN 2182-55-0
CMF C8 H14 O



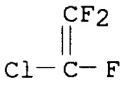
CM 5

CRN 109-92-2
CMF C4 H8 O



CM 6

CRN 79-38-9
CMF C2 Cl F3



RN 126913-59-5 HCAPLUS
CN Methanone, bis[4-[[[4,6-bis[bis(methoxymethyl)amino]-1,3,5-triazin-2-yl](methoxymethyl)amino]methoxy]-2-hydroxyphenyl]-, polymer with [4-[[[4,6-bis[bis(methoxymethyl)amino]-1,3,5-triazin-2-yl](methoxymethyl)amino]methoxy]-2-hydroxyphenyl](2,4-dihydroxyphenyl)methanone, [(ethenyloxy)methyl]oxirane, 1,1,2,3,3,3-hexafluoro-1-propene, N,N,N',N',N'',N''-hexakis(methoxymethyl)-1,3,5-triazine-2,4,6-triamine and 1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 126913-58-4
CMF C41 H62 N12 O15

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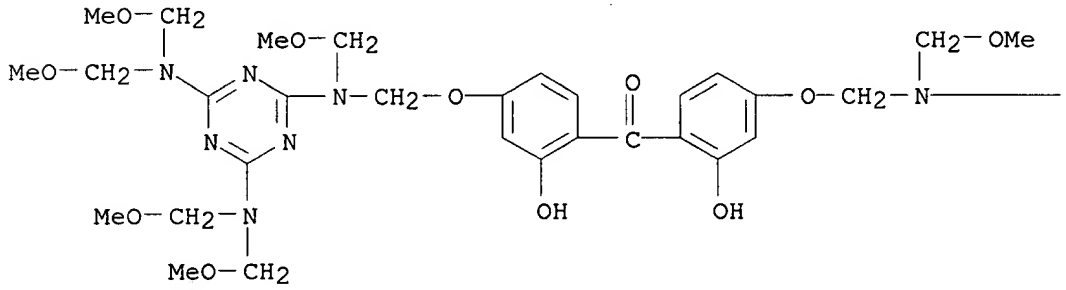
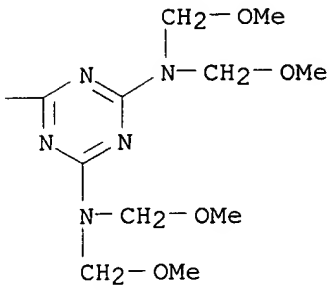
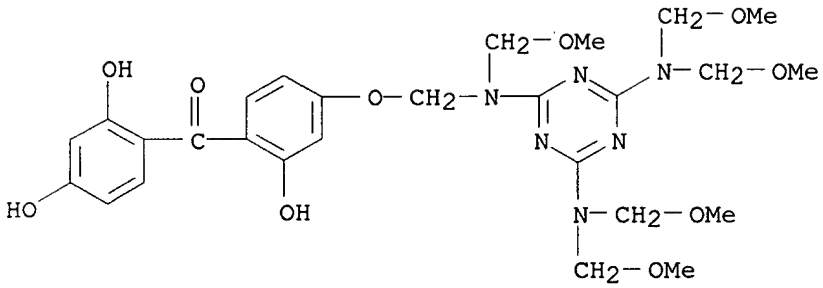




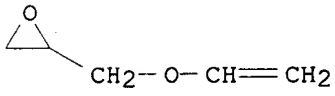
CM 2

CRN 126913-57-3
CMF C27 H36 N6 O10



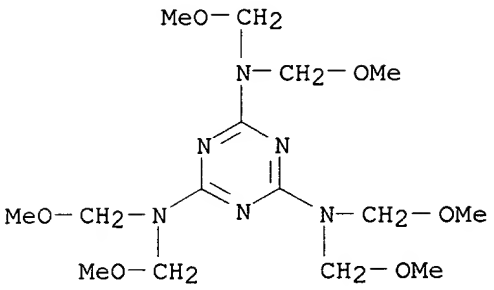
CM 3

CRN 3678-15-7
CMF C5 H8 O2



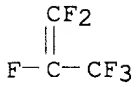
CM 4

CRN 3089-11-0
CMF C15 H30 N6 O6



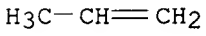
CM 5

CRN 116-15-4
CMF C3 F6



CM 6

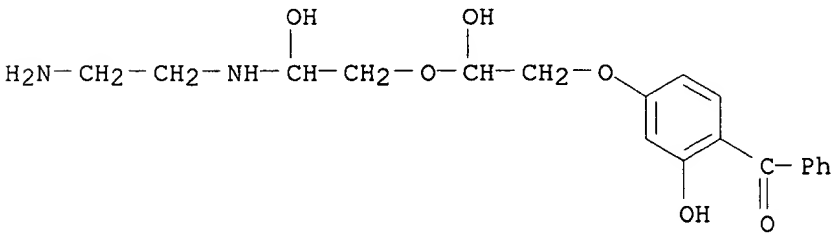
CRN 115-07-1
CMF C3 H6



RN 126940-63-4 HCAPLUS
CN Propanoic acid, ethenyl ester, polymer with [4-[2-[2-[(2-aminoethyl)amino]-2-hydroxyethoxy]-2-hydroxyethoxy]-2-hydroxyphenyl]phenylmethanone, 1,2-ethanediamine, 2-propen-1-ol and tetrafluoroethene (9CI) (CA INDEX NAME)

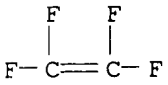
CM 1

CRN 126940-62-3
CMF C19 H24 N2 O6



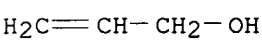
CM 2

CRN 116-14-3
CMF C2 F4



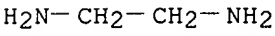
CM 3

CRN 107-18-6
CMF C3 H6 O



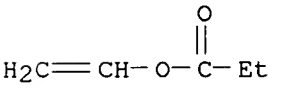
CM 4

CRN 107-15-3
CMF C2 H8 N2



CM 5

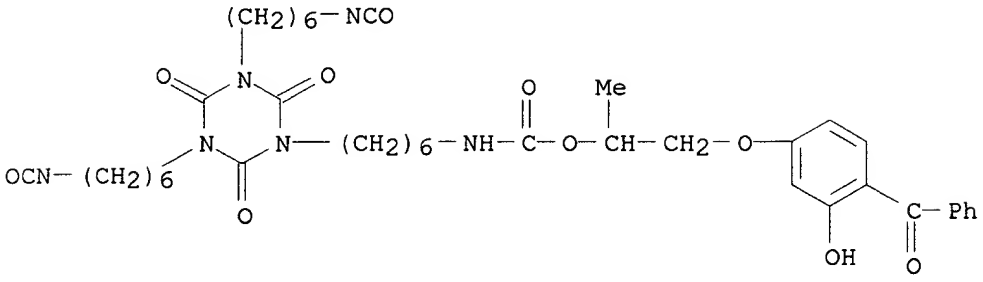
CRN 105-38-4
CMF C5 H8 O2



RN 126940-64-5 HCAPLUS
CN Carbamic acid, [6-[tetrahydro-3,5-bis(6-isocyanatohexyl)-2,4,6-trioxo-1,3,5-triazin-1(2H)-yl]hexyl]-, 2-(4-benzoyl-3-hydroxyphenoxy)-1-methylethyl ester, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane, ethoxyethene and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

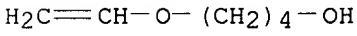
CM 1

CRN 126895-37-2
CMF C40 H52 N6 O10



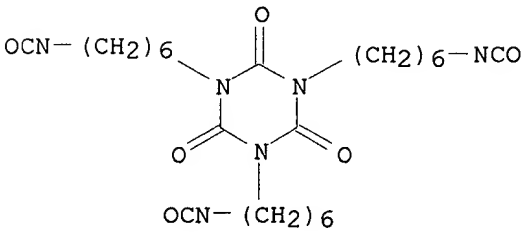
CM 2

CRN 17832-28-9
CMF C6 H12 O2



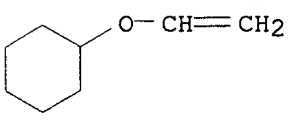
CM 3

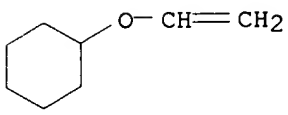
CRN 3779-63-3
CMF C24 H36 N6 O6



CM 4

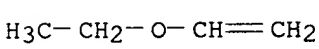
CRN 2182-55-0
CMF C8 H14 O





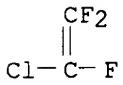
CM 5

CRN 109-92-2
CMF C4 H8 O



CM 6

CRN 79-38-9
CMF C2 Cl F3

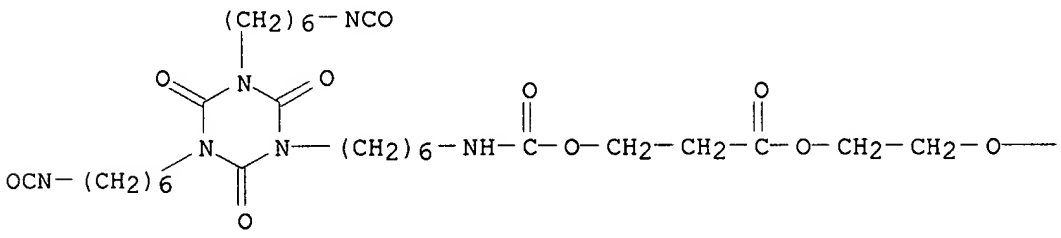


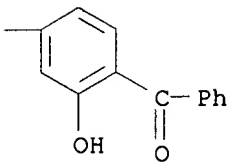
RN 126976-98-5 HCAPLUS
CN Propanoic acid, 3-[[[[6-[tetrahydro-3,5-bis(6-isocyanatohexyl)-2,4,6-trioxo-1,3,5-triazin-1(2H)-yl]hexyl]amino]carbonyl]oxy]-, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane, ethoxyethene and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 126959-02-2
CMF C42 H54 N6 O12

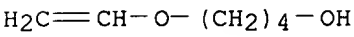
PAGE 1-A





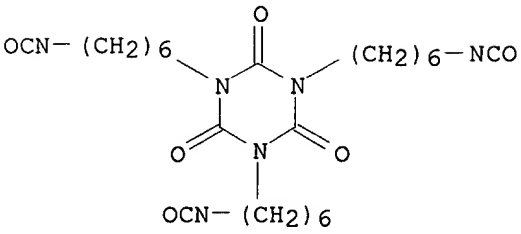
CM 2

CRN 17832-28-9
CMF C6 H12 O2



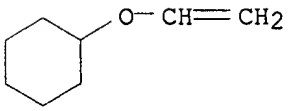
CM 3

CRN 3779-63-3
CMF C24 H36 N6 O6



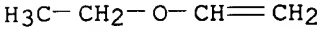
CM 4

CRN 2182-55-0
CMF C8 H14 O



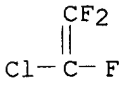
CM 5

CRN 109-92-2
CMF C4 H8 O



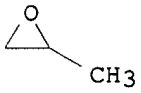
CM 6

CRN 79-38-9
CMF C2 Cl F3



IT **75-21-8**, Oxirane, reactions **75-56-9**, reactions
RL: RCT (Reactant)
(reaction of, with dihydroxybenzophenone)
RN 75-21-8 HCAPLUS
CN Oxirane (9CI) (CA INDEX NAME)

RN 75-56-9 HCAPLUS
CN Oxirane, methyl- (9CI) (CA INDEX NAME)



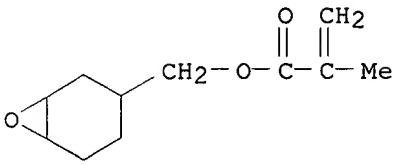
L108 ANSWER 18 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1991:145567 HCAPLUS
DN 114:145567
TI **Curable polymer** dispersions for coating compositions
IN Numa, Nobushige; Nakahata, Akimasa; Yamane, Masahiro; Isozaki, Osamu; Nakai, Noboru
PA Kansai Paint Co., Ltd., Japan
SO Ger. Offen., 75 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C08L101-02
ICS C08L057-04; C08L043-04; C08F002-14; C08F002-44; C09D201-02; C09D157-04; C09D143-04
ICA C08L075-04; C08L067-02; C08L083-04; C08L063-00; C08L029-02
ICI C08L101-02, C08L101-04, C08L101-06, C08L101-10; C08L057-04, C08L057-08, C08L057-10
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 46
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4006578	A1	19900913	DE 1990-4006578	19900302
	DE 4006578	C2	19940915		
	JP 02232249	A2	19900914	JP 1989-52532	19890303
	GB 2229729	A1	19901003	GB 1990-4101	19900223
	GB 2229729	B2	19921007		
	CA 2011358	AA	19900903	CA 1990-2011358	19900302
	CA 2011358	C	19971223		
	US 5418293	A	19950523	US 1993-117321	19930907
PRAI	JP 1989-52532		19890303		
	US 1990-486698		19900301		

AB The title dispersions, with good stability even at high solids concns., are prepd. by polymn. of unsatd. compds. in org. solvents in the presence of resins contg. **F**, hydrolyzable alkoxysilyl or silanol groups, and **epoxy** groups as dispersion stabilizers. A copolymer (mol. wt. 6200) was prepd. by AIBN-**initiated** polymn. of 1-[(allyloxy)methyl]-5,6-epoxyhexahydroindan 25, allyl 3-(triacetoxysilyl)propyl ether 10, vinyl acetate 10, vinyl butyrate 15, and C2ClF3 40 parts in iso-BuCOMe at 60.degree., and esterified (100 parts) with 1.4 part methacrylic acid to give a dispersing agent (I). Peroxide-**initiated** polymn. of styrene 10, acrylonitrile 20, MMA 29, (3,4-epoxycyclohexyl)methyl methacrylate 25, 3-(trimethoxysilyl)propyl methacrylate 5, divinylbenzene 1, and a macromer [from PhSi(OH)3 7800 and 3-(trimethoxysilyl)propyl acrylate 200 g] 10 parts in 90 parts 8:1 heptane-BuOAc contg. 200 parts 50% soln. of I gave a dispersion (av. particle size 0.15 .mu.m) of polymer which showed no pptn. or agglomeration after 3 mo at room temp.

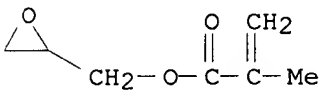
IT **82428-30-6D, polymers** with acrylic compds. and silanol deriv. macromers
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, dispersing agents for)

RN 82428-30-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester (9CI) (CA INDEX NAME)

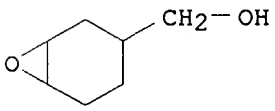


IT **106-91-2D**, Glycidyl methacrylate, reaction products with functional fluoropolymers **767-11-3D**, 7-Oxabicyclo[4.1.0]heptane-3-methanol, reaction products with functional fluoropolymers **132071-63-7D**, **reaction** products with acrylic acid **132071-64-8 132071-64-8D**, **reaction** products with (trimethoxysilyl)propylisocyanate and isocyanatoethylmethacrylate **132099-42-4D**, **reaction** products with isocyanatoethylmethacrylate **132109-24-1 132109-24-1D**, **reaction** products with (trimethoxysilyl)propylisocyanate and isocyanatoethylmethacrylate
RL: USES (Uses)
(dispersing agents, for acrylic **polymer coating** compns.)

RN 106-91-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester (9CI) (CA INDEX NAME)



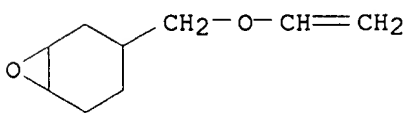
RN 767-11-3 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-methanol (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

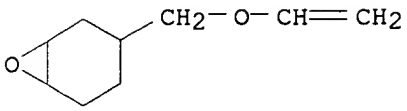


RN 132071-63-7 HCAPLUS
CN 2-Propenoic acid, polymer with chlorotrifluoroethene, (ethenyloxy)cyclohexane and 3-[(ethenyloxy)methyl]-7-oxabicyclo[4.1.0]heptane (9CI) (CA INDEX NAME)

CM 1

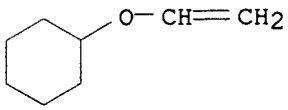
CRN 131718-57-5
CMF C9 H14 O2





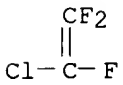
CM 2

CRN 2182-55-0
CMF C8 H14 O



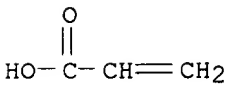
CM 3

CRN 79-38-9
CMF C2 Cl F3



CM 4

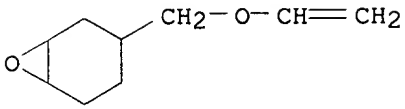
CRN 79-10-7
CMF C3 H4 O2



RN 132071-64-8 HCAPLUS
CN 2-Propenoic acid, ethyl ester, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane and 3-[(ethenyloxy)methyl]-7-oxabicyclo[4.1.0]heptane (9CI) (CA INDEX NAME)

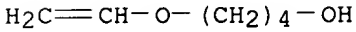
CM 1

CRN 131718-57-5
CMF C9 H14 O2



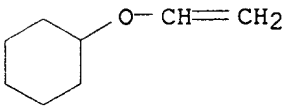
CM 2

CRN 17832-28-9
CMF C6 H12 O2



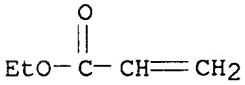
CM 3

CRN 2182-55-0
CMF C8 H14 O



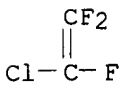
CM 4

CRN 140-88-5
CMF C5 H8 O2



CM 5

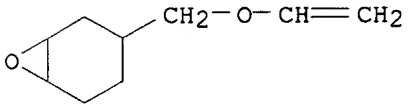
CRN 79-38-9
CMF C2 Cl F3



RN 132071-64-8 HCAPLUS
CN 2-Propenoic acid, ethyl ester, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol, (ethenyloxy)cyclohexane and 3-[(ethenyloxy)methyl]-7-oxabicyclo[4.1.0]heptane (9CI) (CA INDEX NAME)

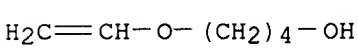
CM 1

CRN 131718-57-5
CMF C9 H14 O2



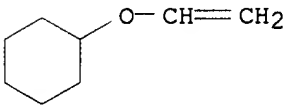
CM 2

CRN 17832-28-9
CMF C6 H12 O2



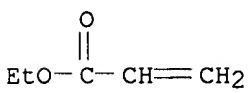
CM 3

CRN 2182-55-0
CMF C8 H14 O



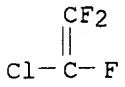
CM 4

CRN 140-88-5
CMF C5 H8 O2



CM 5

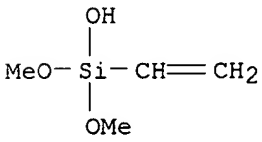
CRN 79-38-9
CMF C2 Cl F3



RN 132099-42-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with chlorotrifluoroethene, 1,4-diethenylbenzene, ethenylbenzene, ethenyldimethoxysilanol, (ethenyloxy)cyclohexane, ethyl 2-propenoate, .alpha.-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-.omega.-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)], 2-propenenitrile and tetrafluoroethene (9CI) (CA INDEX NAME)

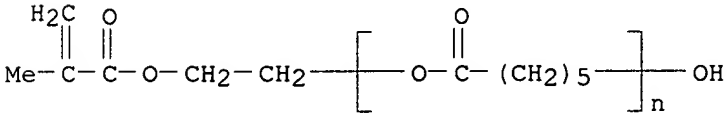
CM 1

CRN 131718-55-3
CMF C4 H10 O3 Si



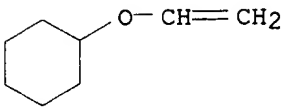
CM 2

CRN 81984-60-3
CMF (C6 H10 O2)n C6 H10 O3
CCI PMS



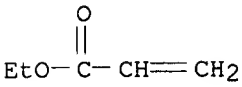
CM 3

CRN 2182-55-0
CMF C8 H14 O



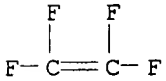
CM 4

CRN 140-88-5
CMF C5 H8 O2



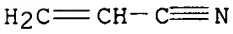
CM 5

CRN 116-14-3
CMF C2 F4



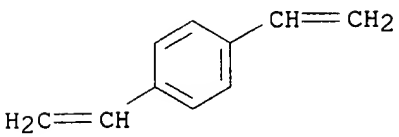
CM 6

CRN 107-13-1
CMF C3 H3 N



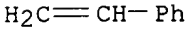
CM 7

CRN 105-06-6
CMF C10 H10



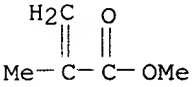
CM 8

CRN 100-42-5
CMF C8 H8



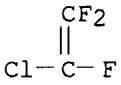
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

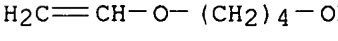
CRN 79-38-9
CMF C2 Cl F3



RN 132109-24-1 HCAPLUS
CN 2-Propenoic acid, ethyl ester, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol and (ethenyloxy)cyclohexane (9CI) (CA INDEX NAME)

CM 1

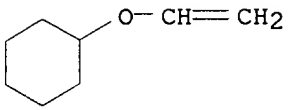
CRN 17832-28-9
CMF C6 H12 O2



CM 2

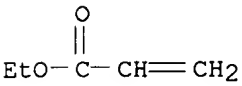
CRN 2182-55-0

CMF C8 H14 O



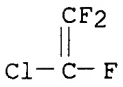
CM 3

CRN 140-88-5
CMF C5 H8 O2



CM 4

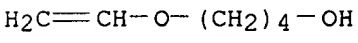
CRN 79-38-9
CMF C2 Cl F3



RN 132109-24-1 HCAPLUS
CN 2-Propenoic acid, ethyl ester, polymer with chlorotrifluoroethene, 4-(ethenyloxy)-1-butanol and (ethenyloxy)cyclohexane (9CI) (CA INDEX NAME)

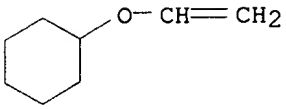
CM 1

CRN 17832-28-9
CMF C6 H12 O2



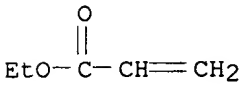
CM 2

CRN 2182-55-0
CMF C8 H14 O



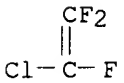
CM 3

CRN 140-88-5
CMF C5 H8 O2



CM 4

CRN 79-38-9
CMF C2 Cl F3



L30 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN 1989:479484 HCAPLUS
DN 111:79484
TI Fluorine-containing alicyclic and aromatic cyclic compounds, process, and adhesive composition containing the compounds
IN Maruno, Tohru; Nakamura, Kozaburo; Murata, Norio; Omori, Akira; Shimizu, Yoshiki; Kubo, Motonobu; Kobayashi, Hideo
PA Daikin Industries, Ltd., Japan; Nippon Telegraph and Telephone K. K.
SO Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 295639	A2	19881221	EP 1988-109495	19880614
	EP 295639	A3	19891102		
	EP 295639	B1	19931201		
	R: DE, FR, GB, IT, NL				
	JP 01085949	A2	19890330	JP 1988-146243	19880614
	JP 08030028	B4	19960327		
	US 5157148	A	19921020	US 1990-587131	19901018
	US 5202360	A	19930413	US 1991-737577	19910729
PRAI	JP 1987-149784		19870615		
	JP 1987-308556		19871208		
	US 1988-205853		19880613		
	US 1990-586846		19901018		

AB Heat- and water-resistant adhesive compns. with low refractive index, useful for optical parts, comprise epoxides RCH2O[C(CF3)2MC(CF3)2OCH2CH(OH)CH2O]nC(CF3)2MC(CF3)2OCH2R (I; R = glycidyl; M = divalent group of .gtoreq.1 alicyclic or arom. hydrocarbon, may be linked with O, S, CH2, or may form a condensed ring; n = 0 or pos. no.) or epoxy acrylates I (R = CH2:CYCO2CH2CH(OH)-, M and n are as above, Y = H or Me) and photopolymn. initiator or curing agent. The reaction of 4 mol hexafluoroacetone with 2 mol Ph2O at 40-50.degree. in the presence of AlCl3 gave a diol (b.p. 144-146.degree.) which was further reacted with epichlorohydrin to give the corresponding diglycidyl ether compd. I (R = glycidyl; M = p-C6H4O-pC6H4), (II). A compn. contg. II (n = 0.2) (epoxy equiv. 360, refractive index 1.47) 70, HCF2CF2CH2OR1 (R1 = glycidyl) 30, and hexafluorophosphate triphenylsulfonium 3 parts was cured at 60.degree. using 100 mJ/cm2 UV light to give a cured product with refractive index 1.494, adhesion (to glass at 23.degree.) 147 kg/cm2, and heat resistance (time of sepn. of adhesive from glass in 80.degree. water) >24 h, vs. 1.564, 110, and >24, resp., for amine-cured Epikote 828.

L108 ANSWER 26 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1985:561947 HCAPLUS
DN 103:161947
TI Radiation-**curable** coating compositions
PA Dainichiseika Color and Chemicals Mfg. Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C09D005-00
ICS C08J007-04; C09D003-58; C09D003-727
ICA C08F002-48
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 60094468	A2	19850527	JP 1983-202804	19831031
JP 01049306	B4	19891024		

AB The title compns., flexible and scratch-resistant, contain 60-99.9 parts radiation **curable** monomer or oligomer mixt. (5-100% with .gtoreq.3 **functional** groups) and 0.1-40 parts fluoropolymer powder or beads. Thus, a mixt. of TLP 10F1 (PTFE) [**9002-84-0**] (particle diam. 8-16 .mu.) 20, difunctional urethane acrylate (mol. wt. 1500-2000) 40, trimethylolpropane trimethacrylate (I) 20, and N-vinylpyrrolidone 20 parts (viscosity 500 cP at 25.degree.) was coated on a PVC flooring sheet to 40 .mu. and electron beam-**cured** (50 Mrad) in 3 s to give a matte, semitransparent layer with Taber abrasion 2.5 mg (1000 cycles, 500 g), compared with 12 mg with tripropylene glycol dimethacrylate in place of I.

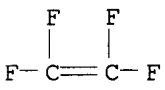
IT 50-70-4D, glycidyl ethers 3290-92-4 **9002-84-0** 15625-89-5
25038-71-5 25068-38-6 29570-58-9 42978-66-5
RL: USES (Uses)
(in radiocurable **coatings**)

IT **9002-84-0 25038-71-5 25068-38-6**
RL: USES (Uses)
(in radiocurable **coatings**)

RN 9002-84-0 HCAPLUS
CN Ethene, tetrafluoro-, homopolymer (9CI) (CA INDEX NAME)

CM 1

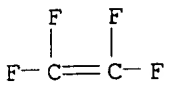
CRN 116-14-3
CMF C2 F4



RN 25038-71-5 HCAPLUS
CN Ethene, tetrafluoro-, polymer with ethene (9CI) (CA INDEX NAME)

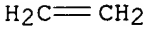
CM 1

CRN 116-14-3
CMF C2 F4



CM 2

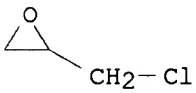
CRN 74-85-1
CMF C2 H4



RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

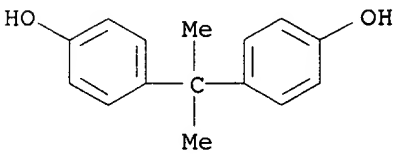
CM 1

CRN 106-89-8
CMF C3 H5 Cl O



CM 2

CRN 80-05-7
CMF C15 H16 O2



L108 ANSWER 27 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1985:63716 HCAPLUS
DN 102:63716
TI Photo-**curable epoxy resin** compositions
PA Union Carbide Corp., USA
SO Jpn. Kokai Tokkyo Koho, 43 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C08G059-40; C08G059-20; C09D003-58
CC 42-9 (Coatings, Inks, and Related Products)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59147018	A2	19840823	JP 1984-18530	19840206
	JP 63040442	B4	19880811		
	CA 1243147	A1	19881011	CA 1984-445640	19840119
	EP 119425	A1	19840926	EP 1984-101196	19840206
	EP 119425	B1	19900124		
	R: BE, DE, FR, GB, IT, NL				
	US 4874798	A	19891017	US 1985-798363	19851118
PRAI	US 1983-464571		19830207		

AB A photo-**curable** alicyclic **epoxy resin** **coating** compn. contg. an active H-contg. org. compd., a photo-**initiator**, and an alicyclic monoepoxide-based **reactive** diluent has low soln. viscosity and gives a tough, water-resistant layer. Thus, a mixt. of ERL 4221 [**25085-98-7**] 66.41, Tone 0305 [92680-70-1] (polycaprolactone triol) 29.09, 4-vinylcyclohexane monoepoxide [**106-86-5**] (diluent) 4.0, FC 508 [**57835-99-1**] 4.0, and FC 171 [74913-25-0] (fluorinated alkyl ester) (surfactant) 0.5 parts with viscosity 258 cP was coated on a steel panel to a thickness of 0.8-1.1 mil and UV-**cured** to give a layer with pencil hardness H, crosscut adhesion test 100/100, and Gardner impact strength 175 in.-lbs. A compn. not contg. a diluent gave a layer with similar properties but had viscosity 810 cP.

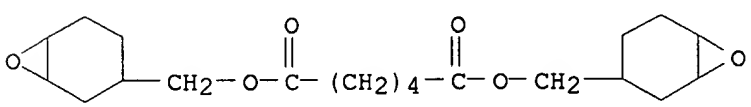
T 11114-17-3 74913-25-0
RL: USES (Uses)
(surfactants, for UV-**curable** alicyclic **epoxy** **resin** coatings)

IT **68924-34-5**
RL: USES (Uses)
(3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexane carboxylate **polymer**)

RN 68924-34-5 HCAPLUS
CN Hexanedioic acid, bis(7-oxabicyclo[4.1.0]hept-3-ylmethyl) ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 3130-19-6
CMF C20 H30 O6

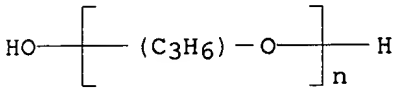


IT **25322-69-4D**, polyol
RL: USES (Uses)

(alicyclic **epoxy resin** coatings contg., UV-**curable**, with low viscosity and tough **cured** layers)

RN 25322-69-4 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **25085-98-7**

RL: USES (Uses)

(coating, UV-**curable**, with low viscosity and tough **cured** layers)

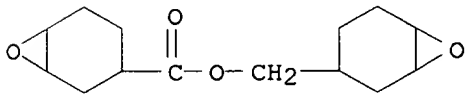
RN 25085-98-7 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2386-87-0

CMF C14 H20 O4



IT **26616-47-7**

RL: TEM (Technical or engineered material use); USES (Uses)

(coatings, UV-**curable**, with low viscosity tough **cured** layers)

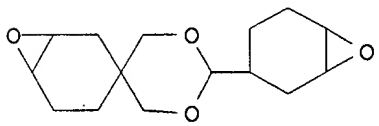
RN 26616-47-7 HCAPLUS

CN Spiro[1,3-dioxane-5,3'-[7]oxabicyclo[4.1.0]heptane], 2-(7-oxabicyclo[4.1.0]hept-3-yl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 3388-03-2

CMF C15 H22 O4



IT **57835-99-1**

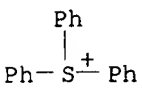
RL: USES (Uses)

(photopolymn. **initiators**, for UV-**curable** alicyclkic **epoxy resin coatings**)

RN 57835-99-1 HCAPLUS
CN Sulfonium, triphenyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

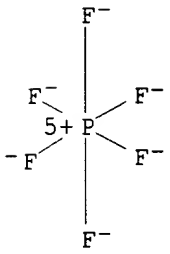
CM 1

CRN 18393-55-0
CMF C18 H15 S

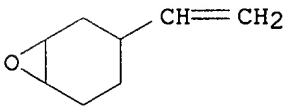


CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



IT **106-86-5**
RL: USES (Uses)
(reactive diluent, UV-**curable** alicyclic **epoxy** **resin** coatings contg., with low viscosity and tough **cured** layers)
RN 106-86-5 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane, 3-ethenyl- (9CI) (CA INDEX NAME)



L108 ANSWER 22 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1990:79591 HCAPLUS
DN 112:79591
TI Radiation-**curable** resin compositions for coatings with high hardness and toughness
IN Okamoto, Shuichi; Miyazaki, Nobuyuki; Munakata, Seiji
PA Asahi Glass Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08F020-22
ICS C08F002-48; C08F020-22; C09D003-727; C09D005-00
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01182306	A2	19890720	JP 1988-3225	19880112

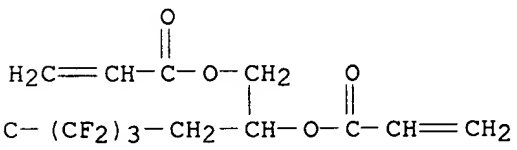
AB The title compns. giving coatings with improved weather resistance and lower refractive indexes contain fluoro compds. having .gtoreq.2 C-C unsatd. groups. Thus, polymg. 53:23:21% chlorotrifluoroethylene-hydroxybutyl vinyl ether-Et vinyl ether, and reacting the polymer (OH value 100 mg KOH/g, no.-av. mol. wt. 4000) with 2-isocyanatoethyl methacrylate in xylene in the presence of hydroquinone Me ether 50, CH2:CHCO2C2H4C6F12C2H4O2CCHCH2(I) 30, pentaerythritol triacrylate 15, C9F19CH2CH2O2CCH:CH2 5, and Irgacure 184 5 parts, spreading on a glass plate, and UV irradiating produced a coating with pencil hardness 3H, yellowness change (300 h UV irradn.) <0.1 and refractive index 1.43, vs. 2H, 3.4, and 1.47, resp., without I.

T **125098-67-1 125098-68-2 125167-57-9 125193-70-6**
RL: TEM (Technical or engineered material use); USES (Uses)
(**coatings**, weather-resistant, with improved hardness and low refractive index)

RN 125098-67-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8-dodecafluoro-1,10-decanediyl di-2-propenoate, 4-(ethenyloxy)-1-butanol, ethoxyethene, 2-(hydroxymethyl)-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 1-(2,2,3,3,4,4,5,5,5-nonafluoropentyl)-1,2-ethanediyl di-2-propenoate and tetrafluoroethene (9CI) (CA INDEX NAME)

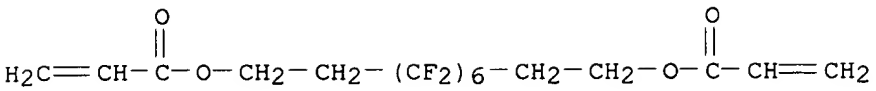
CM 1

CRN 125098-66-0
CMF C13 H11 F9 O4



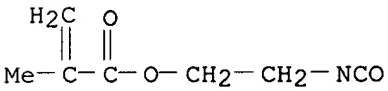
CM 2

CRN 115137-52-5
CMF C16 H14 F12 O4



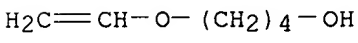
CM 3

CRN 30674-80-7
CMF C7 H9 N O3



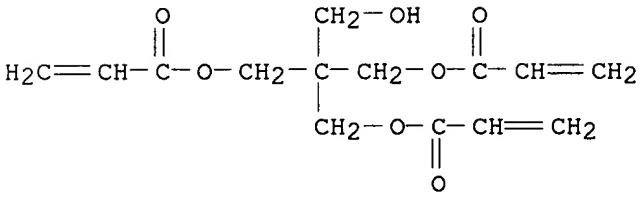
CM 4

CRN 17832-28-9
CMF C6 H12 O2



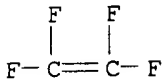
CM 5

CRN 3524-68-3
CMF C14 H18 O7



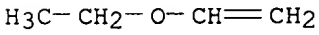
CM 6

CRN 116-14-3
CMF C2 F4



CM 7

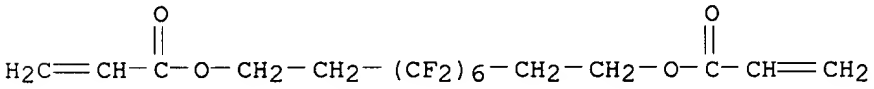
CRN 109-92-2
CMF C4 H8 O



RN 125098-68-2 HCAPLUS
CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8-dodecafluoro-1,10-decanediyl ester, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol] di-2-propenoate and 2-(hydroxymethyl)-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

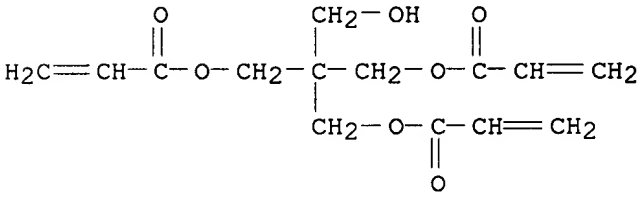
CM 1

CRN 115137-52-5
CMF C16 H14 F12 O4



CM 2

CRN 3524-68-3
CMF C14 H18 O7



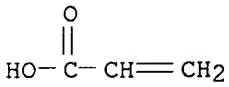
CM 3

CRN 53814-24-7
CMF (C15 H16 O2 . C3 H5 Cl O)x . 2 C3 H4 O2

CDES 8:GD,ESTER

CM 4

CRN 79-10-7
CMF C3 H4 O2

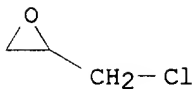


CM 5

CRN 25068-38-6
CMF (C15 H16 O2 . C3 H5 Cl O)x
CCI PMS

CM 6

CRN 106-89-8
CMF C3 H5 Cl O

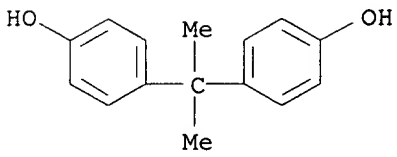


chlormethyl oxirane

Phenol, 4,4'-(1-methylethylidene) bis-, polymer with chlormethyl oxirane

CM 7

CRN 80-05-7
CMF C15 H16 O2

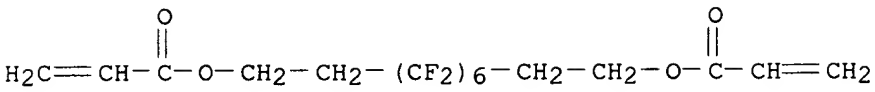


RN 125167-57-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8-dodecafluoro-1,10-decanediyl di-2-propenoate, 4-(ethenyloxy)-1-butanol, ethoxyethene, 2-(hydroxymethyl)-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl 2-propenoate and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

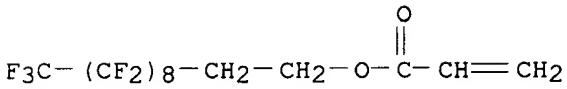
CRN 115137-52-5

CMF C16 H14 F12 O4



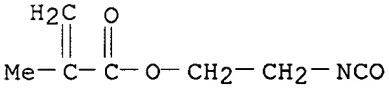
CM 2

CRN 41328-01-2
CMF C14 H7 F19 O2



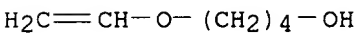
CM 3

CRN 30674-80-7
CMF C7 H9 N O3



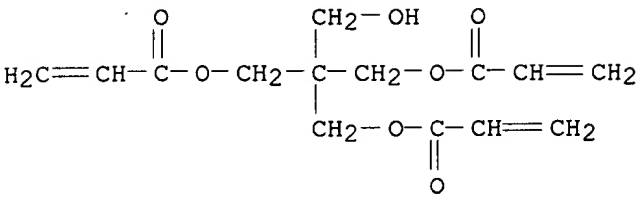
CM 4

CRN 17832-28-9
CMF C6 H12 O2



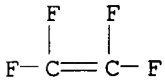
CM 5

CRN 3524-68-3
CMF C14 H18 O7



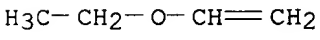
CM 6

CRN 116-14-3
CMF C2 F4



CM 7

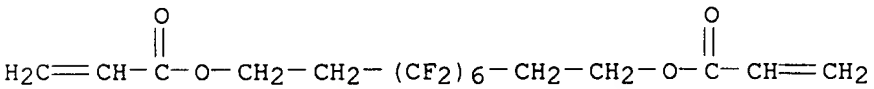
CRN 109-92-2
CMF C4 H8 O



RN 125193-70-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with chlorotrifluoroethene, 3,3,4,4,5,5,6,6,7,7,8,8-dodecafluoro-1,10-decanediyl di-2-propenoate, 4-(ethenyloxy)-1-butanol, ethoxyethene, 2-(hydroxymethyl)-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

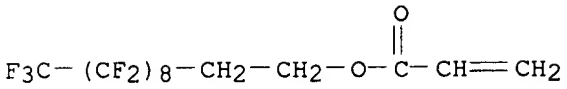
CRN 115137-52-5
CMF C16 H14 F12 O4



CM 2

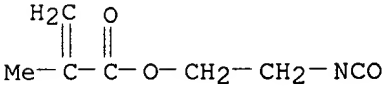
CRN 41328-01-2

CMF C14 H7 F19 O2



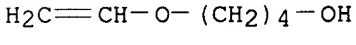
CM 3

CRN 30674-80-7
CMF C7 H9 N O3



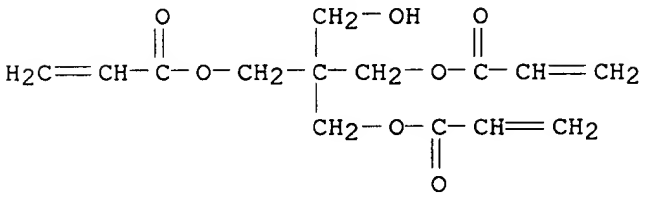
CM 4

CRN 17832-28-9
CMF C6 H12 O2



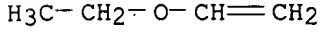
CM 5

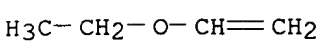
CRN 3524-68-3
CMF C14 H18 O7



CM 6

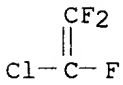
CRN 109-92-2
CMF C4 H8 O





CM 7

CRN 79-38-9
CMF C2 Cl F3



L108 ANSWER 30 OF 30 HCAPLUS COPYRIGHT 2002 ACS
AN 1974:571514 HCAPLUS
DN 81:171514
TI Coating solution of citric acid, malonic acid, or the acid ester of citric or malonic acid with a selected polyhydroxy aliphatic acid, and a selected fluoroolefin copolymer
IN Cargagna, Paul D.
PA du Pont de Nemours, E. I., and Co.
SO U.S., 7 pp.
CODEN: USXXAM
DT Patent
LA English
IC C08F
NCL 260033400R
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 3

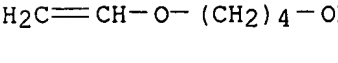
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3819562	A	19740625	US 1972-311978	19721204
	BE 807793	A1	19740527	BE 1973-138158	19731126
	JP 49098836	A2	19740918	JP 1973-133657	19731130
	IT 1012102	A	19770310	IT 1973-32021	19731130
	FR 2208952	A1	19740628	FR 1973-42974	19731203
	FR 2208952	B1	19781110		
	AU 7363137	A1	19750605	AU 1973-63137	19731203
	GB 1442412	A	19760714	GB 1973-55995	19731203
	DE 2360429	A1	19740606	DE 1973-2360429	19731204
	NL 7316605	A	19740606	NL 1973-16605	19731204
	AT 7310155	A	19760615	AT 1973-10155	19731204
	AT 335018	B	19770225		

AB Compns. contg. **reactive** copolymers with hydroxyl or glycidyl groups and polycarboxylic acids yielded adherent, transparent, hydrolysis-resistant, abrasion-resistant, thermoformable **coatings** when **cured** at moderate temps. for relatively short times. Thus, a **coating** soln. contg. 11% BuOH soln. of 1:1 4-hydroxybutylvinyl ether-tetrafluoroethylene polymer [**25120-52-9**] 100, malonic acid 2.5, AcOH 20, silicone leveling agent 0.01 and methyl isobutyl ketone 10 g and 0.64 ml 20% MeC6H4SO3H in isopropanol was applied on poly(methyl methacrylate) [**26141-88-8**] panels, dried 45 min at 25% relative humidity and **cured** at 170.deg. for 30 min, to give films with good optical properties, excellent adhesion and moderate abrasion resistance.

IT **25120-52-9 26141-88-8**
RL: TEM (Technical or engineered material use); USES (Uses)
(**coatings**, contg. polycarboxylic acids, abrasion- and hydrolysis-resistant)
RN 25120-52-9 HCAPLUS
CN 1-Butanol, 4-(ethenyloxy)-, polymer with tetrafluoroethene (9CI) (CA INDEX NAME)

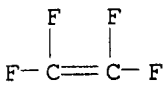
CM 1

CRN 17832-28-9
CMF C6 H12 O2



CM 2

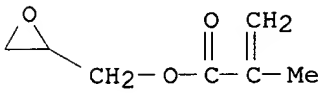
CRN 116-14-3
CMF C2 F4



RN 26141-88-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

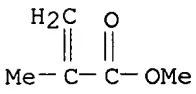
CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 80-62-6
CMF C5 H8 O2

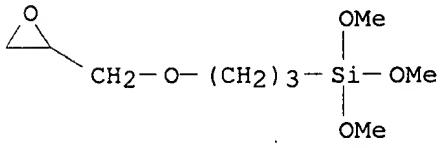


L13 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2002 ACS
AN 1996:397246 HCAPLUS
DN 125:61114
TI Storage-stable powder coating compositions with epoxysilane components
IN Murakami, Ichiro; Akamatsu, Shoji; Agawa, Tetsuro
PA Dow Corning Toray Silicone Co., Ltd., Japan
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM C09D005-03
ICS C09D163-00; C09D183-06
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9611988	A1	19960425	WO 1995-JP2093	19951012
	W: US				
	RW: DE, FR, GB				
	JP 08113696	A2	19960507	JP 1994-275590	19941014
	EP 735118	A1	19961002	EP 1995-934286	19951012
	R: DE, FR, GB				
	US 6090890	A	20000718	US 1996-652595	19960813
PRAI	JP 1994-275590	A	19941014		
	WO 1995-JP2093	W	19951012		

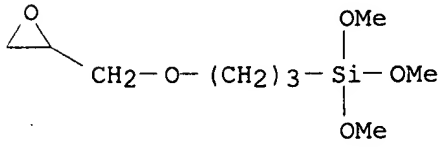
AB Title compns., with good throwing power, and impact, soil, and weather resistance, comprise 2-98:2-98 branched epoxidized organopolysiloxanes and compds. having epoxy group-reactive **functional** groups. A powd. compn. of 1,12-dodecanedioic acid 15, benzoin 1, a leveling agent 1, Cl3SiPh-3-glycidoxypropyltrimethoxysilane copolymer 85, and TiO2 43 parts showed good storage stability at 35.degree. for 1 mo and throwing power at 40 kV and 200 g/min and gave a 60-.mu.m film with 98% gloss maintenance after 2000 h under sunshine weatherometer.

RN 2530-83-8 HCAPLUS
CN Silane, trimethoxy[3-(oxiranylmethoxy)propyl]- (9CI) (CA INDEX NAME)



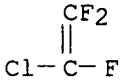
CM 1

CRN 2530-83-8
CMF C9 H20 O5 Si



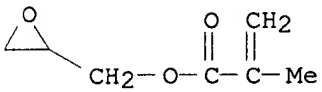
CM 9

CRN 79-38-9
CMF C2 Cl F3



CM 1

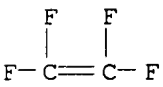
CRN 106-91-2
CMF C7 H10 O3



L13 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2002 ACS
AN 1994:484672 HCAPLUS
DN 121:84672
TI Surface properties of an anhydride-epoxy resin cured against different mold surfaces
AU Chihani, Thami; Bergmark, P.; Flodin, Per; Hjertberg, Thomas
CS Dep. Polym. Technol., Chalmers Univ. Technol., Gothenburg, 41296, Swed.
SO J. Adhes. Sci. Technol. (1993), 7(6), 569-82
CODEN: JATEE8; ISSN: 0169-4243
DT Journal
LA English
CC 37-5 (Plastics Manufacture and Processing)
AB An epoxy resin consisting of diglycidyl ether of bisphenol A and methyltetra-hydrophthalic anhydride (MTHPA) was cured against molds with different surface characteristics: poly(ethylene terephthalate) (PET), perfluorinated ethylene propylene copolymer (FEP), and air. The epoxy surfaces were analyzed using contact angle measurements and XPS. The results presented are interpreted in terms of differences in surface energy between the surface of the mold and the epoxy resin. With PET as the mold surface, the surface content of ester groups resulting from the anhydride increased as compared to the av. bulk content. With the non-polar FEP mold, the amt. of ester groups decreased instead. Shear tests on overlap joints obtained by adhesive bonding with polyurethane and epoxy adhesives showed, however, a high adhesive joint strength, both for epoxy surfaces obtained with FEP as mold, and for ground surfaces with a bulk compn. The surfaces generated in PET molds yielded only poor adhesive joint strength. These differences in joint strength could be related to the concn. of reactive **functional** groups (--OH, --COOH) in the outermost surface of the cured epoxy resin.
RN 27029-05-6 HCAPLUS
CN 1-Propene, polymer with tetrafluoroethene (9CI) (CA INDEX NAME)

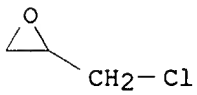
CM 1

CRN 116-14-3
CMF C2 F4



CM 2

CRN 106-89-8
CMF C3 H5 Cl O



L87 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:421116 HCAPLUS
DN 131:45562
TI Fluorine-containing **epoxy resin** composition and its application for **ink-jet** printing **head**
IN Imamura, Isao; Shimomura, Akihiko
PA Canon K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L063-00
ICS **B41J002-01**
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42

Not old enough

FAN.CNT 1

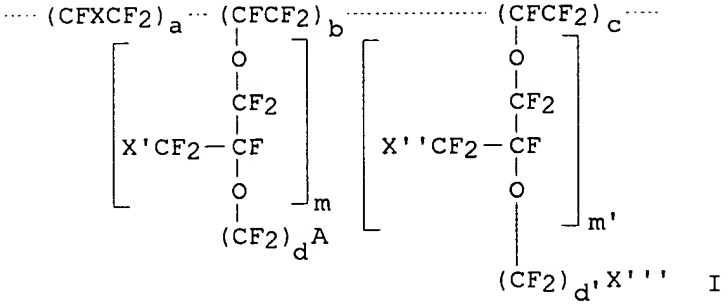
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11181246	A2	19990706	JP 1997-358264	19971225

AB Title compn. with good chem.-, water-, and weather-resistance comprises (a) a multi-functional **epoxy resin** having .gtoreq.2 epoxy groups per mol., (b) a multi-**functional** alc. contg. **perfluoro** group and .gtoreq.2 hydroxyl groups per mol., (c) a silane coupling agent, and (d) a polymn. **initiator** or **curing** agents. Thus, an **ink-jet** printing **head** fabricated from the **epoxy resin** compn. comprising Epikote 828 75, 1,4-bis(2-hydroxyhexafluoroisopropyl)benzene 25, silane coupling agent NUC A-187 5 parts, and **curing** agent Fujicure FXK 830 (50 wt% vs. total main agents) demonstrated high printing quality and durability (no data) using an ink comprising water 65,

L13 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2002 ACS
AN 1990:516792 HCAPLUS
DN 113:116792
TI Manufacture of composites by reactive bonding of functionalized fluoropolymers
IN Golding, Wanda W.; Ezzell, Bobby R.
PA Dow Chemical Co., USA
SO U.S., 11 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM B32B015-08
ICS B32B027-06
NCL 428421000
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 55, 56, 57
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4916020	A	19900410	US 1988-160796	19880226
	JP 02503409	T2	19901018	JP 1989-502704	19890221
	CA 1294865	A1	19920128	CA 1989-592010	19890224
PRAI	US 1988-160796		19880226		
	WO 1989-US672		19890221		

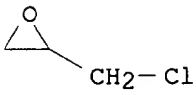
GI



I

AB Composites are formed by reactive bonding of pendant group-contg. **functional** fluoropolymer (I; a and b = integer >0; c = 0 or integer >0; X, X', X'', and X''' = halogen, CF3, or C2-10-fluoroalkyl; n and m' = 0-4; d and d' = 1-6; and A = a sulfonic group, a carboxylic group or a deriv. thereof) which terminate with a second reacting group and a first substrate having a first reacting group, provided a portion of the first reacting group and a portion of the second reacting group have reacted with each other to form covalent or ionic bonds. The **functional** fluoropolymers are useful for coating other materials and serving as a transition or adhesive layer. Thus, 1040 EW sulfonyl fluoride-**functional** I film was converted to sulfonamide deriv. reacted with triethylenetetramine, coated on both sides with an epoxy resin adhesive comprising TER 331 resin, CaCO3 filler, and Versamid 140 **curing agent**, bonded to degreased stainless steel strips, cured at 100.degree., and post-cured under pressure to give a composite showing lap shear strength 1440 lbs/in2 and failure mode adhesive, compared with 98 and adhesive for a composite manufd. from FEP Teflon instead of the **functional** I.

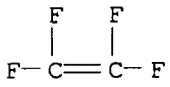
CRN 106-89-8
CMF C3 H5 Cl O



IT **9002-84-0P**, Polytetrafluoroethylene
RL: PREP (Preparation)
(composites with carbon steel and sulfonamide functionalized fluoropolymer, manuf. of)
RN 9002-84-0 HCAPLUS
CN Ethene, tetrafluoro-, homopolymer (9CI) (CA INDEX NAME)

CM 1

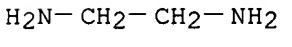
CRN 116-14-3
CMF C2 F4



IT **12624-35-0**, Versamid 140
RL: USES (Uses)
(crosslinkers, for epoxy resin adhesives, for sulfonamide-functionalized fluoropolymers)
RN 12624-35-0 HCAPLUS
CN 9,12-Octadecadienoic acid (9Z,12Z)-, dimer, polymer with 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 107-15-3
CMF C2 H8 N2



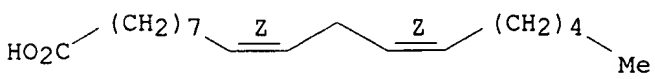
CM 2

CRN 6144-28-1
CMF (C18 H32 O2)2
CCI PMS

CM 3

CRN 60-33-3
CMF C18 H32 O2
CDES 2:Z,Z

Double bond geometry as shown.



L13 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2002 ACS
AN 1987:619270 HCAPLUS
DN 107:219270
TI Thermosetting **fluorocarbon** polymer primers
IN Higginbotham, Clark A.; Wichmann, James W.
PA DeSoto, Inc., USA
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM C08L027-14
ICS C08L027-16; C08L033-14; C08L063-02
NCL 523435000
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

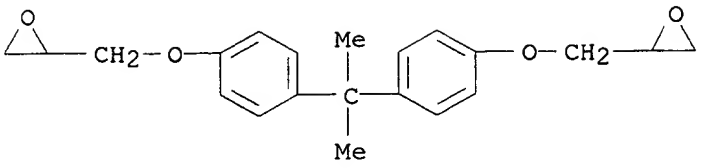
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4684677	A	19870804	US 1986-828980	19860213
	EP 232823	A2	19870819	EP 1987-101342	19870131
	EP 232823	A3	19890517		
	R: BE, DE, FR, GB, IT, NL, SE				
	CA 1270080	A1	19900605	CA 1987-528922	19870204
	JP 62192470	A2	19870824	JP 1987-30609	19870212
PRAI	US 1986-828980		19860213		

AB Air-drying, solvent-borne, thermosetting primers with good adhesion to **fluorocarbon** polymer topcoatings are prepd. from solns. contg. 20-45% fluoropolymer, a sol., hydroxy-**functional** copolymer of monoethylenically unsatd. monomers contg. 5-30% hydroxy-**functional** monoethylenic monomer at 0.7-1.5 parts hydroxy-**functional** copolymer/part fluoropolymer, epoxy resin providing 0.1-0.6 parts polyepoxide/part hydroxy-**functional** copolymer, a **curing agent** reactive with the hydroxy functionality of the acrylic copolymer and epoxy resin, and inorg. pigment at resin solids-pigment ratio 1:(0.2-0.8). Thus, a compn. contg. TiO2 154, SrCrO4 17, 55%-solids 20:15:65 Et acrylate-2-hydroxyethyl methacrylate-Me methacrylate copolymer-dipropylene glycol monoacetate (I) soln. 291, I 142, BuOAc 180, bisphenol A diglycidyl ether homopolymer (mol. wt. 390) 64, etherified melamine-HCHO condensate (90% soln.) 62, and poly(vinylidene fluoride) (II) 150 lbs was thinned (4-5):1 with MEK, sprayed on an Al panel, allowed to air-dry for 5-10 min, oversprayed with a II topcoat, and baked to give a coating resistant to .gtoreq.100 MEK double rubs.

IT **111404-70-7**
RL: USES (Uses)
(fluoropolymer primers contg., with good adhesion to fluoropolymer topcoatings)
RN 111404-70-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethyl 2-propenoate, formaldehyde, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

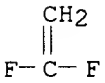
CRN 1675-54-3
CMF C21 H24 O4



IT **24937-79-9**, Poly(vinylidene fluoride)
RL: USES (Uses)
(primers contg. thermosetting polymers and, with good adhesion to fluoropolymer topcoatings)
RN 24937-79-9 HCAPLUS
CN Ethene, 1,1-difluoro-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 75-38-7
CMF C2 H2 F2



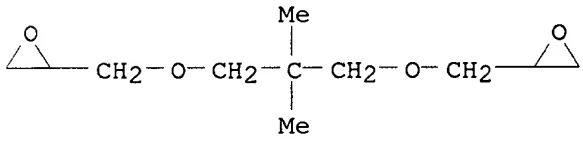
L21 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
AN 1993:148691 HCAPLUS
DN 118:148691
TI Preparation of curable polyurethanes
IN Matsumoto, Yasuhiro; Shirota, Kanji
PA Dainippon Ink and Chemicals, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G018-62
ICS C09D175-04
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 04178417	A2	19920625	JP 1990-306679	19901113 <--
JP 3055167	B2	20000626		

AB The title polymers, useful for manuf. of films, adhesives, leather substitutes and coatings, are prepd. by the reaction of polyisocyanates with OH-terminated macromers, which are prepd. by radical polymn. in the presence of mercaptan chain-transfer agents bearing .gtoreq.2 OH groups. Thus, heating ethylene glycol (I)-neopentyl glycol-isophthalic acid-sebacic acid copolymer diol (mol. wt. 2000) 100, oligomeric glycidyl methacrylate-Me methacrylate copolymer diol (mol. wt. 6000, prepd. in the presence of thioglycerol) 100, MDI 49, Sn octanoate 0.05, and PhMe 110 parts at 70.degree. for 2 h, adding 8 parts I and 489 parts MEK and heating gave a resin soln., 100 g of which and 12 g epoxy curing agent (Luckamide EA 240) were applied on a steel sheet to give films with adhesion 7.6 kg/in.
RL: PREP (Preparation)
(prepn. of, for films, with good adhesion, solvent-resistant)
RN 146266-02-6 HCAPLUS
CN Hexanedioic acid, polymer with butyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis[oxirane], 1,6-hexanediol and 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

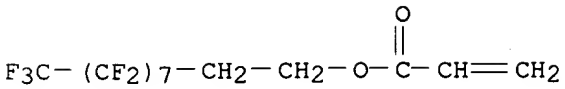
CRN 17557-23-2
CMF C11 H20 O4



RN 146266-06-0 HCAPLUS
CN Hexanedioic acid, polymer with 1,4-butanediol, 1,2-ethanediol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, 1,1'-methylenebis[4-isocyanatobenzene] and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 27905-45-9
CMF C13 H7 F17 O2



CM 2

CRN 124-04-9
CMF C6 H10 O4

RN 146571-30-4 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, polymer with decanedioic acid, 2,2-dimethyl-1,3-propanediol, 1,2-ethanediol, Luckamide EA 240, 1,1'-methylenebis[4-isocyanatobenzene], methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

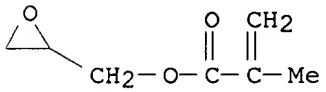
CM 1

CRN 146104-33-8
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

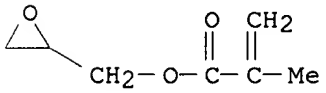
CM 6

CRN 106-91-2
CMF C7 H10 O3



CM 7

CRN 106-91-2
CMF C7 H10 O3



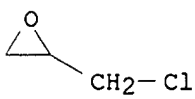
L13 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2002 ACS
AN 1996:290206 HCAPLUS
DN 124:319790
TI Epoxidized low viscosity rubber toughening modifiers for epoxy resin coating compositions
IN St. Clair, David John
PA Shell Internationale Research Maatschappij B.V., Neth.
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C08G059-34
ICS C08G059-22; C08L063-08; C08L063-00
CC 42-9 (Coatings, Inks, and Related Products)
Section cross-reference(s): 39
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9602586	A1	19960201	WO 1995-EP2818	19950711
	W: AU, BR, CA, CN, FI, JP, KR, MX, NO				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5499409	A	19960319	US 1994-277379	19940718
	CA 2195316	AA	19960201	CA 1995-2195316	19950711
	AU 9531138	A1	19960216	AU 1995-31138	19950711
	AU 699157	B2	19981126		
	EP 771334	A1	19970507	EP 1995-926931	19950711
	EP 771334	B1	20001018		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
	JP 10502696	T2	19980310	JP 1995-504710	19950711
	BR 9508291	A	19980519	BR 1995-8291	19950711
	AT 197057	E	20001115	AT 1995-926931	19950711
	ES 2151604	T3	20010101	ES 1995-926931	19950711
	FI 9700182	A	19970116	FI 1997-182	19970116
	NO 9700203	A	19970116	NO 1997-203	19970116
PRAI	US 1994-277379	A	19940718		
	WO 1995-EP2818	W	19950711		

AB The compns comprise (A) curable arom. and curable cycloaliph. epoxy resins, (B) epoxidized low viscosity polydiene polymers wherein the polymers contain 1.0-7.0 m-equiv of epoxy/ g of polymers, (C) **curing agents** and (D) hydroxy **functional** materials which are sol. in mixts. A and B. Thus, a coating, having pencil hardness H and good adhesion, was prepd. from a mixt. of Cyracure UVR 6110 60, Epon 828 10, epoxidized butadiene-isoprene block copolymer rubber 20, 2-ethyl-1,3-hexanediol 10, Cyracure UVI 6974 (photoinitiator) 0.5 and Fluorad FC 430 (**fluorocarbon** surfactant) 0.1 part.
RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

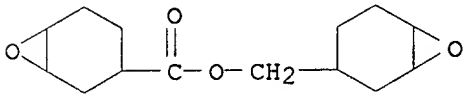
CRN 106-89-8
CMF C3 H5 Cl O



RN 25085-98-7 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2386-87-0
CMF C14 H20 O4



L13 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2002 ACS
AN 1997:44527 HCAPLUS
DN 126:75330
TI Bisalkenyl-substituted nadimides, their manufacture, and their thermosetting compositions
IN Futaesaku, Norio; Washimori, Akiko; Kudo, Masaaki; Fukuda, Hideo; Maruyama, Isao
PA Maruzen Oil Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07D209-76
ICS C08F022-40; C08F026-06; C08K005-3417; C08L101-00
CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 27, 37, 42
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08277265	A2	19961022	JP 1995-104880	19950404

OS MARPAT 126:75330
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Bisalkenyl-substituted nadimide I is synthesized by the reaction of nadic anhydride deriv. II with diamine III (R1, R2 = H, Me; R3 = H, halogen, Me; R4, R5 = C1-4 alkylene; p, r = 0-3; q = 0, 1). Thermosetting compns. with good dielec. property, water absorbance, and transparency are made from nadimide I and other components selected from maleimide compds., alkenyl-substituted nadimide compds., epoxy resins, phenolic resins, vinylbenzyl compds., vinyl compds., cyclic olefins, **functional** group-contg. conjugated dienes, and unsatd. polyester resins. The thermosetting resins may also contain silicone resins, modified silicone resins, polysulfone resins, polyphenylene sulfides, and fluoropolymers.
CM 3

CRN 106-89-8
CMF C3 H5 Cl O